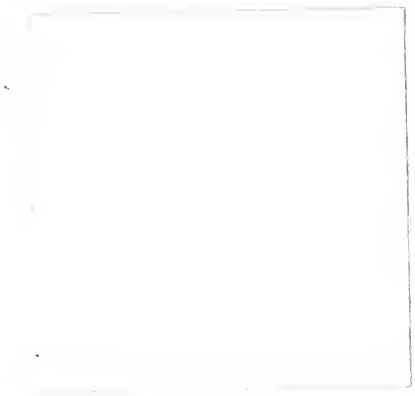


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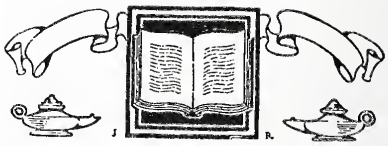
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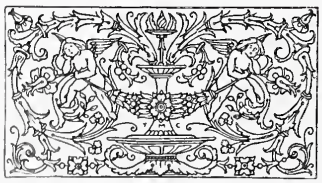
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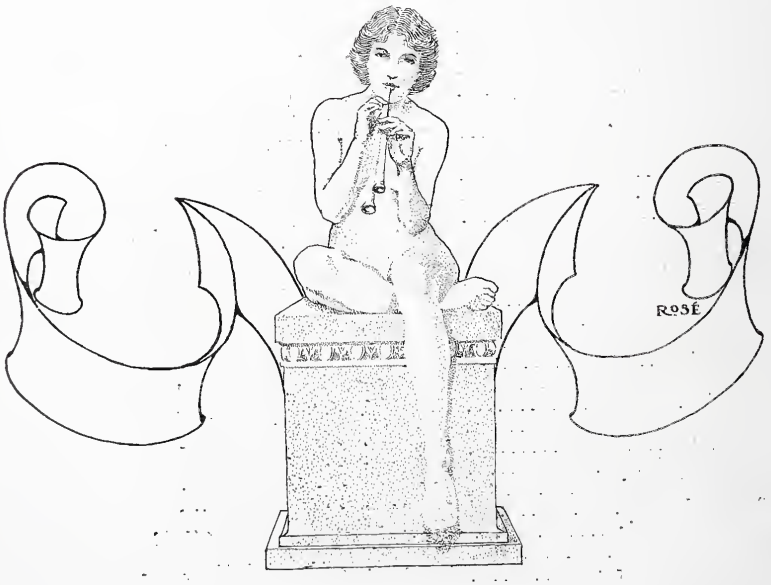
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HARRY W. DESMOND . . . . . Editor
RUSSELL F. WHITEHEAD . . . . Associate Editor
RALPH REINHOLD . . . . . Business Manager
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THE ROYAL INSURANCE BUILDING, SAN FRANCISCO, CALIFORNIA. HOWELLS & STOKES, ARCHITECTS.

THE
ARCHITECTVRAL
RECORD

JANUARY, 1912

VOLUME XXXI NUMBER I



THE NEW SAN FRANCISCO

ARCHITECTVRAL & SOCIAL CHANGES WROVGHT BY THE RECONSTRVCTION



By A. C. DAVID

DOUBTLESS THERE ARE many large cities which have survived calamities as destructive as that which overtook San Francisco in April, 1906; but most assuredly no city, whose ordinary economic and social life was so completely disorganized by a cataclysm, ever made a quicker or a more gallant recovery. Five years after the earthquake the city was substantially rebuilt; and it was better prepared than ever to resume the work of expansion which had been so rudely interrupted. Of course, the wound left many scars, both on the body of the city and on the lives of its inhabitants. Many promising careers were interrupted; many men were obliged to begin their business life all over again at a middle or advanced age. An element of stress and strain was introduced into a community which theretofore had put in its day's work with less effort than had any similar community in this country. The visible sign of these changes could be seen in streets, not far from the centre of business, occupied still only by the ruins of the old city. In this sense San Francisco has not yet recovered from the conflagration of 1906. It suffered from a mutilation whose effects will never wholly disappear—not even when the generation which felt the blow shall have passed away. A new San Francisco had succeeded the old. The new city may and will regain its prosperity; but, as the result of the effort, it may lose some of its individuality.

The old San Francisco was a most winning and entertaining place—the least American of the larger cities of the United States. During its two generations of vigorous life, it had passed through many vicissitudes, all of which had left their marks upon it, and the total effect of which had been to give it an appearance and an atmosphere wholly its own. It contained a number of buildings of real architectural distinction, which had been designed and

built early in the fifties by well-trained foreigners who had not found life in the mining camps to their liking. The period of architectural good behavior passed and was succeeded by a generation whose taste and methods in building were execrable; but there was something about the city which made a sympathetic visitor forgive its sins and forget its shortcomings. The spirit of its inhabitants was not confined and stupefied by their own misbehavior. They did not take their own mistakes too seriously. The settlement of the State and the upbuilding of the city had been undertaken in a spirit of adventure, which had emancipated its inhabitants from the tyranny of Puritan scruples and from the resulting conscientious self-congratulation. San Francisco could misbehave without being corrupted by its own misbehavior. Its future was not compromised by the necessity either of approving or disapproving itself. It was buoyant, gay, entertaining, entirely willing to leave a good deal to chance, and entirely unwilling to sacrifice the present either to the past or to the future. San Franciscans could do a great deal of work with a comparatively small amount of effort and have plenty of energy left for the really serious business of amusing one another. In 1905 it looked as if with all its prospects of increasing population and business San Francisco would eventually be distinguished less as a great industrial and commercial city than as the centre of a thoroughly naturalized intellectual and artistic life. Los Angeles and Seattle might become as populous and as wealthy, but Los Angeles and Seattle were merely Middle Western cities transplanted to the Pacific Coast. San Francisco had never allowed its will to exercise an absolute dominion over its intelligence. Unlike any other American city, it had retained its freedom. It was adventurous in spirit as well as in business.

Since the disaster of 1906, and as a consequence thereof, San Francisco has assuredly changed inside and out. In the fight to recover its lost ground an element of effort and strife was introduced into the life of the city which did a good deal to modify its former easy and buoyant attitude towards its own business. Individuals who had never been anxious before had anxieties thrust upon them. The whole community could not be sure in the beginning how soon the recovery would come and how complete it would be. In its anxiety San Francisco became self-conscious. Remembering as it did its former ease and buoyancy of spirit, and knowing that recovery meant above all the recovery of self-possession, it tried, as soon as the worst was over, to be gay, even in the midst of its own ruins. It made a gallant attempt, which may well have relieved many a sufferer from oppressive cares; but the attempt seems to have been forced, and its success on the whole doubtful. San Francisco could not and did not by such means recover its self-possession. Its present divided it from its past. Its citizens began to have doubts and scruples about its future. They became more conscientious. The graft prosecutions provoked hard feeling and suspicion among a group of men who theretofore had probably enjoyed a pleasanter and fuller companionship than would be found among the leading business and professional men of any large city in the world. San Francisco found that its job of reconstruction was not confined to buildings. The task of making a new city ran over into the task of making a better city; and the task of making a better city required a sacrifice of the present to the future, which did not entirely harmonize with the irresponsible gayety of its past.

The work of reconstruction was begun, and it has proceeded so rapidly that the business and shopping district has been covered with new buildings. The new buildings erected in the business district are fireproof, and, if the city should ever again be visited by a conflagration, the spread of the fire would meet with a much more effective resistance than it did in 1906. The design of these new structures compares favorably with that of the office buildings and shops erected in any city in the United



THE NEWHALL BUILDING, SAN FRANCISCO, CALIFORNIA. LEWIS HOBART, ARCHITECT.

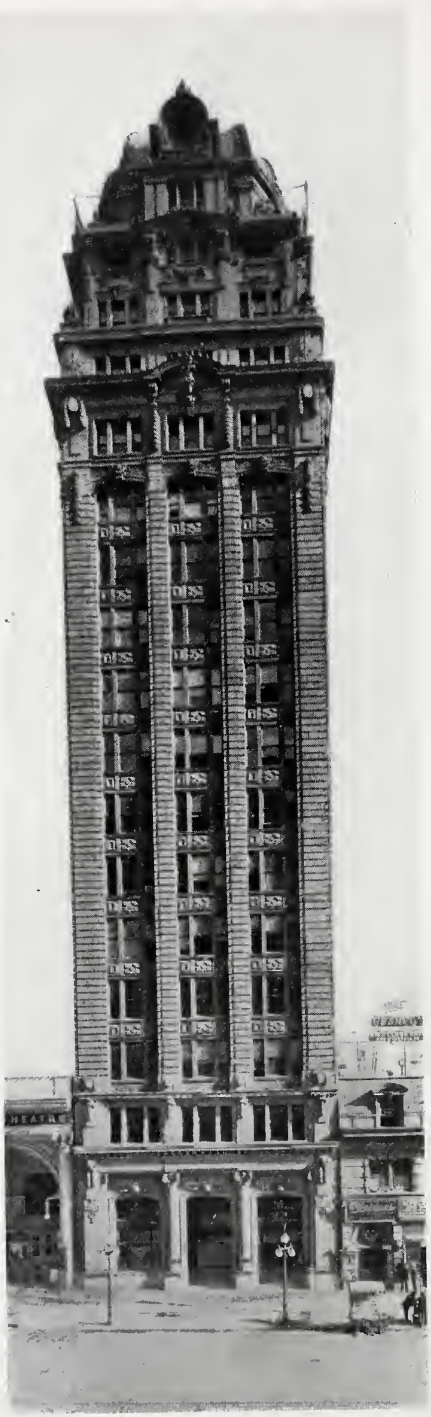


FIRST NATIONAL BANK BUILDING, SAN FRANCISCO, CALIFORNIA. WILLIS POLK, ARCHITECT.



THE BALBOA BUILDING, MARKET STREET, SAN FRANCISCO, CALIFORNIA. BLISS & FAVILLE, ARCHITECTS.

States. The average is, of course, very much higher than was the average which formerly prevailed. The local architects, who are responsible for the work, have done all that could be expected of them—particularly in view of the hurry which necessarily characterized much that they did. Yet, in spite of the fact that San Franciscans have no reason to feel ashamed of their new city, anyone who remembered the old city must feel that San Francisco has suffered some loss of individuality. The new city is good but it is good in the same way that the newer parts of Cleveland or Seattle are good. In appearance San Francisco has drawn nearer to the ordinary American city of approximately the same size and wealth. If it could have grown more slowly and had not broken so violently with its own past, it would have retained much more of its peculiarly local character. San Francisco is a better city undoubtedly than it was in 1905, but it is hardly sufficiently better to compensate its citizens and its visitors for what has been lost.



THE HUMBOLDT BANK BUILDING.
Frederick H. Meyer, Archt.

San Francisco has always had metropolitan aspirations. Its admirers claimed that the Pacific Coast had many physical and economic characteristics different from those of the rest of the United States, and that these local peculiarities, nourished as they would be on an area large enough to be an empire, would eventually result in the rearing of a genuinely metropolitan city. These claims were not extravagant. A metropolis must needs have a diversified, economic, social and intellectual life, which has been centralized in that locality by the force of economic conditions, and which combines strong local peculiarities with a more than local style and distinction. A metropolis in this sense San Francisco was and is still destined to become. But the process of becoming a metropolis cannot be hurried, and the conflagration and its results have postponed the day of consummation rather than accelerated its arrival. It forced the construction of a new city which was divided by a deep gulf from the old city, but which nevertheless could not



THE DAVIS-SCHONWASSER COMPANY BUILDING, SAN FRANCISCO, CALIFORNIA. MACDONALD & APPLEGARTH, ARCHITECTS.

dispense with many of the worst limitations of its past.

San Francisco possesses, as much as any city in the world a metropolitan site. Its location on its hills and on the bay is unique, and it is superb. But the little attempt was made to take advantage of the natural beauties of the location. Just before the conflagration a plan had been prepared by Mr. Burnham which was admirably designed to remove both the inconvenience and the



THE JOSEPH FREDERICKS & CO. BUILDING, SAN FRANCISCO, CALIFORNIA.
D. H. BURNHAM & CO., ARCHITECTS.

street plan of the city built on this site ignored every consideration of convenience and good looks. The streets were run straight up hills on grades which made traffic impossible; and very essential vulgarity of the old plan. If the conflagration had never occurred, it is possible that the scheme might have been adopted and the most flagrant anomalies and mistakes of the old plan

gradually eradicated. But the losses suffered in the conflagration were so severe that the adoption of a reformed street system was considered to be economically impossible. The new city is being rebuilt on the same bad old street system, and the question of dealing with its absurdities has been postponed. During the years when Seattle, San Francisco's economic rival, has been reducing the grades of its hills and converting an over-grown village into a genuine city. San Francisco has been trying to erect a better city on an essentially bad and precarious foundation.

If San Francisco is ever to become a metropolis, it will have to break more completely with its physical past than it has yet done. Its citizens like to talk about it as the Paris of America; but French restaurants, electric lights and a prevailing atmosphere of gayety do not make a Paris. A metropolitan city must be tied together by a plan which provides for every essential economic and aesthetic need; and San Francisco still remains devoid of such a plan. Just at present it seems to be in danger of losing the charm of its earlier days without approaching any nearer to its grandiose ideal of metropolitan distinction. That in the end the city will lose its individuality and will differ from other Western cities merely in its size, its number of inhabitants, and the peculiarities of its economic enterprises the writer does not for a moment believe. When the conflagration has become a thing of the remote past, when the Panama-Pacific Exposition is over, and when the Panama Canal has brought about an inevitable increase of Italian immigration and a better supply of labor, San Francisco will begin slowly to transform itself into a real metropolis. The latent promise which it contains of a liberal intellectual and social life is so deeply rooted that it will survive the many years of stress and effort that confront the city in the effort really to better its own condition. The freedom from care which its citizens like to celebrate as in some way characteristic of San Franciscan life will have to be earned somewhat more effectually in the future than it has in the past; but no one who has felt the pulse of the typical San Franciscan can have much doubt as to the result.

In the meantime, the new buildings which the city will have to show to its visitors in the year of the Panama-Pacific Exposition will be creditable both to the city itself and to their architects. They are characteristic of the best tendencies prevailing in the design of modern American commercial buildings. The number of skyscrapers is comparatively few. With so much building going on the city could not afford to build very high on very many sites. But few as they are, they are characterized both by certain negative and positive merits. They are all of them business-like structures, admirably adapted to their practical uses; and they all of them conform to the standards which common sense has all over the country imposed upon the appearance of such edifices. There is not one aberration among them. Ornament is sparingly used and generally with effect. There are a few conspicuous successes. The First National Bank Building, designed by Willis Polk, for instance, is in every respect excellently handled. The Balboa Building on Market Street of Bliss & Faville is almost equally good. The architects were in this case hampered by the necessity of breaking the lines of their piers and providing the two lower floors with glass shop fronts; but the rest of the design is admirable, both in the balance of the composition and in the detail. The Newhall Building by Lewis Hobart is more ornate, but its ornament is justified by the good taste and discretion with which it has been applied. All of these buildings have scale, in so far as a structure with the dimensions of a skyscraper can have scale. Their vertical lines are emphasized, but they do not pretend to be towers. The Humboldt Bank Building, on the other hand, is a tower; but, unfortunately, it has not been very well managed. The design of the crowning stories is confused and the base is weak.

The new shops are much more numerous than the new office buildings; and



THE CITY OF PARIS BUILDING, SAN FRANCISCO, CAL.
Clinton Day, Architect.



A RETAIL STORE—I. MAGNIN CO., SAN FRANCISCO, CAL.
Wm. Mooser, Architect.

they have on the whole been unusually well designed for this class of building. Retail storekeepers all over the United States do not as a rule keep much good architecture in stock; but in San Francisco a real attempt has been made to obtain new stores that are inoffensive and thoroughly practical, in case they are not really good-looking. They are from three to seven stories in height, and the scale of the composition is usually sacrificed to the necessity of obtaining abundant light for the upper stories. In these cases, however, the sacrifice is frankly made. Architectural style having been excluded by the front door, no attempt is made to let it in by a side entrance. A good example of a comparatively ornate building is that of Davis, Schonwasser & Co., designed by MacDonald & Applegarth. This edifice is only three stories high and occupies a



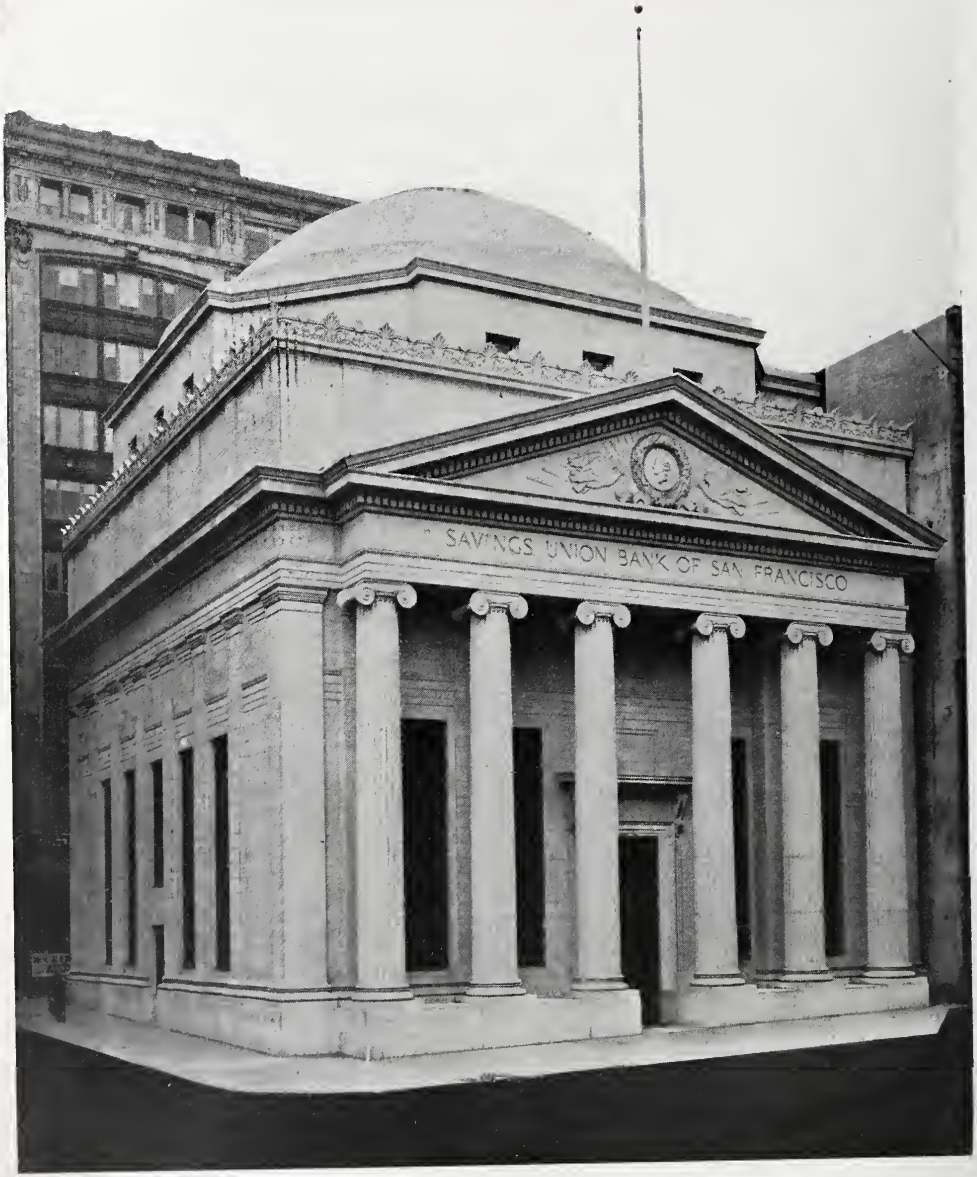
THE A. M. ROBERTSON BUILDING, UNION SQUARE, SAN FRANCISCO, CALIFORNIA.
A. B. FOULKS, ARCHITECT.



THE BANK OF CALIFORNIA, SAN FRANCISCO, CALIFORNIA. BLISS & FAVILLE, ARCHTS.



THE BANK OF CALIFORNIA, SAN FRANCISCO, CALIFORNIA. BLISS & FAVILLE, ARCHTS.



THE SAVINGS UNION BANK OF SAN FRANCISCO, SAN FRANCISCO, CAL. BLISS & FAVILLE, ARCHITECTS.



OFFICE BUILDING OF BALFOUR, GUTHRIE & CO, SAN FRANCISCO, CAL. BLISS & FAVILLE, ARCHITECTS.

whole block front. The architects were able, consequently, to throw the two upper stories into a colonnade. The lower story, consisting as it necessarily does, chiefly of plate glass, makes a weak support for such a large order; but it is not necessary to push this objection very hard. The order does not, as a matter of fact, look very heavy, and the plate glass is provided with plain and comparatively solid frames. Consequently, while the building is not impeccable as a matter of design, it constitutes a fair compromise between severe practical and aesthetic demands. Another comparatively ornate store is that of Jos. Fredericks & Co. While it possesses no great distinction, it is competently and carefully designed. The shop of the Baldwin Jewelry Company, by Bliss & Faville, has fewer architectural trappings but is one of the best of the simpler and franker buildings. The open and unadorned treatment of third, fourth, fifth and sixth stories harmonizes better with the two plate glass lower stories than does any more complicated and pretentious method of treatment. Another good example of a severely plain and frank treatment is to be found in the warehouse of the Tillman-Bendell Company, designed by Messrs. MacDonald & Applegarth. Finally, the book store of A. M. Robertson is worthy of remark as a very discreet example of the small shop which solicits attention by being modestly but somewhat self-consciously different from its neighbors and prototypes.



THE UNION TRUST COMPANY BANK, SAN FRANCISCO, CALIFORNIA.
Clinton Day, Architect.

Since the earthquake, a number of banks, private banking firms and insurance companies have erected low buildings for their own exclusive use; and some of these are unusually successful. Of these the most conspicuous success is that of the Bank of California, of which Bliss & Faville were the architects. The design of this building manifestly owes something to that of Knickerbocker Trust Company in New York: but a comparison between the treatment of the colossal orders in these two struc-



THE HOME TELEPHONE COMPANY BUILDING, SAN FRANCISCO, CALIFORNIA. COXHEAD & COXHEAD, ARCHITECTS.



THE MECHANICS INSTITUTE—SAN FRANCISCO, CALIFORNIA. ALBERT PISSIS, ARCHITECT.



ALASKA COMMERCIAL BUILDING, SAN FRANCISCO, CALIFORNIA. MEYERS & WARD, ARCHITECTS.



THE N. W. HALSEY & CO. BUILDING—CALIFORNIA STREET—
SAN FRANCISCO, CAL. N. F. WOODRUFF, ARCHITECT.



THE TILLMAN & BENDEL WAREHOUSE, SAN FRANCISCO, CAL.
MacDonald & Applegarth, Archts.



THE NEW ZEALAND INSURANCE CO. BUILDING, SAN FRANCISCO, CAL.
Curlett & Sons, Architects.

tures will, we believe, leave a balance in favor of the San Francisco rather than the New York building. Messrs. Bliss & Faville have studied the central idea more thoroughly, brought it to a completer expression and stripped of unnecessary accessories. They have also had the advantage of a climate in which the marble becomes mellow with age instead of merely dirty. A bank office so good as this would be a credit to any bank in any city in the world. Another very carefully studied design is that of the Savings Union Bank. The architects of these two buildings unquestionably have an unusual talent for purely monumental work. One has only to place them next to the buildings of the Metropolitan Life Insurance Company and the Union Trust Company in order to remark the difference between the real thing and the imitation. The office building of Balfour, Guthrie & Co. is a thoroughly respectable performance of its kind, but the virtuous plainness and simplicity of this façade is rather too conspicuous. The dimensions of the lot and building did not permit the architect to do a really big thing and he was scarcely justified in rejecting so completely the help which he might obtain from a somewhat more ornamented design. A much more interesting and original structure is that of the Home



THE ORPHEUM THEATRE, SAN FRANCISCO, CAL.
Landsberger & Joseph, Architects.



THE COLUMBIA THEATRE, SAN FRANCISCO, CALIFORNIA. BLISS & FAVILLE, ARCHTS.



THE UNIVERSITY CLUB, SAN FRANCISCO, CAL. BLISS & FAVILLE, ARCHITECTS.



THE BOHEMIAN CLUB, SAN FRANCISCO, CAL. GEORGE W. KILHAM, ARCHT.

Telephone Company, designed by Coxhead & Coxhead. In no other office building in this country, so far as we know, has the architect been allowed to use such deep walls; and the effect of these reveals, injurious as they may be to the light of the offices, is very powerful. The building is not beautiful, but it is strong, compact and dignified. It was a daring thing to do, and it was worth doing.

Of the two new theatres illustrated herewith one, the Orpheum, proclaims itself rather too loudly as a leading place of amusement in the Paris of America. The design has some merits, but its cleverness merely emphasizes its bad taste. The Columbia Theatre, on the other hand, is thoroughly good, at least in design. As is usual with the work of these architects, its different elements are well selected and thoroughly composed; and it is festive in appearance without being frivolous. An elaborate attempt to decorate the façade with glazed and colored terra cotta is successful in part, but only in part. This material has undoubtedly great possibilities, because it enables the architect to unite color with decorative detail and the play of light and shade. But the secret of its entirely successful use has not yet been discovered. One of the few new San Franciscan buildings erected by a New York firm is the Palace Hotel, of which Messrs. Trowbridge & Livingston were the architects. There is not much to be said about the exterior, but the interior has been excellently planned, and certain of its rooms have been designed with propriety and effect. On the whole, there is no hotel in the country outside of New York and Chicago in which better taste has been displayed; and when San Francisco becomes a metropolis, it will be able to boast of at least one metropolitan hotel.



THE PALACE HOTEL, SAN FRANCISCO, CAL.
Trowbridge & Livingston, Architects.



The Cathedral Church of Liverpool

G. Gilbert Scott, Architect

By Wilberforce Norsfield

ALMOST A HUNDRED years have lapsed since a Cathedral was first projected for Liverpool—it was then condemned, happily, as a waste of money on a pile of useless and superstitious masonry. Again it revived as an idea in 1870 and even went so far as the selection of a design—this again was left on paper. The present design for the Cathedral was competed for and selected in 1903. The work on the site began in 1904, and in the July of the same year the late King Edward VII. laid the foundation stone. The plan shows a choir and nave—each of three aisled bays, joined together by a great unencumbered preaching space, 80 by 200 feet, with four transepts, two on either side, and crowned with a great octagonal lantern. The public entrances are from the transepts, and the west end. To the east are two stories of vestries lying outside the main walls. From the South Choir Aisle entrance is gained to the Lady Chapel Gallery and thence by a stair the body of the Chapel. The North Aisle of the Choir gives access to the Octagonal Chapterhouse.

The site, 1,020 by 248 feet, is situated on the crest of one of the sandstone ridges which stand on the background of the curved slope on which the city of Liverpool is built. In the eighteenth and early nineteenth centuries the site was partly used as a quarry, then the highest part was levelled and built on, the quarry itself becoming a burial ground. The Cathedral itself is placed at one side of an open space of twenty-two acres, surrounded by roads and houses. On its northern side is a well wooded slope which drops fifty feet to the graveyard below; this with its trees and gravestones makes a charming setting for this elevation of the Cathedral. Owing to the position of the site and the graveyard, it has not been possible to give a correct orientation. The Cathedral lies north and south—the north corresponding to the liturgical east. In describing the church the customary

liturgical nomenclature has been adhered to in defiance of the compass.

The Lady Chapel is the only part at present completed; the Choir and Chapterhouse are now in course of construction; the eastern pair of transepts are to be taken in hand shortly. The work is so far advanced that it is possible to gain something of the ultimate effect. The Choir consists in plan of three aisled bays, forty-one feet centre to centre; to the east is a shallow blank bay to form the Sanctuary—the two western bays on either side are shut off from the aisles by solid walls; against these will abut the stalls. The organ is divided into three parts, the bays on either side at the entrance to the Choir being vaulted at a low level to form two organ chambers. The two remaining eastern bays have high pierced stone parclose screens.

The piers of the Choir do not stand free, each aisle bay being shut off from the next by a solid wall connecting between the pier and the aisle wall, forming in reality recesses pierced at the floor level by low arches to admit of passage.

To the east of the altar outside the main wall is a hall or ambulatory for the marshalling of the choir and giving entrance to the various vestries. This is lighted by four two-light windows high up overlooking the roofs of the vestries and vaulted with a curious ribbed barrel vault. At either end high under the vault are semi-circular corbelled out balconies for spectators. Across the width of the Sanctuary and the ambulatory the aisles continue and are vaulted at the same height and with a vault similar to that under the organ chambers. They are lighted by circular windows at their eastern end. The aisles and the ambulatory admit of a continuous passage outside the Choir. The accustomed order of arch triforium clerestory is not to be found. The aisle wall is carried up to the same height as that of the Choir and in each bay is pierced by a wide two-light window, the sills being forty-one feet from the floor. Some ten feet down below the sills is a narrow walking way tunnelled in the thickness of the wall and lighted from the exterior by narrow loopholes. On either side of the curtain walls, shutting off bay from bay, are small doors which, opening on to corbelled walking ways, continue to the centre where the wall is pierced by low, narrow arches, admitting of passage from bay to bay, and giving access to the organ chambers.

The aisle windows are of simple form —two 6-foot 10¾-inch lights without cusping; over in the heads are circles with undercut cusping. On either jamb are figures cut in the solid with the stone work. The aisles are vaulted with a barrel vault divided into three panels by ribs. The internal label moulds of the windows die into the wall rib at its apex and are brought down to within a foot or so of the springing line, then go off horizontally until they again meet the wall rib.

Over is the triforium of the same width as the aisles and like them, barrel vaulted. Shutting it off from the church is a pierced breast high stone screen; high in the wall at the back are slits, small, so as to admit but little light, just sufficient to make the darkness visible and so accentuate the gloom and mystery.

At this level springs the big vault of the Choir, eighty-four feet above the nave floor. The vault is quadripartite; the great transverse ribs are heavy and much moulded, on them being built walls to act as roof trusses. On plan the Choir bays are almost square and for vaulting are divided into two—a new respond being developed over the apices of the arches—so that each single bay of the Choir will have two bays of vaulting. The sill of the east window is higher by five feet than those of the aisle windows. From jamb to jamb it is 36 feet; from cell to apex, 76 feet, and is divided into four lights. On either side over each pair is a cusped circle, 11 feet 6 inches in diameter, and in the apex of the arch a smaller one. Like the aisle windows this has no cusps in the heads of its four lights. The centre mullion on the interior and on the exterior is decorated with sculpture; under will be a reredos of the same redstone as the Cathedral reaching up to the sill. All the interior fittings of the



PERSPECTIVE VIEW OF THE NORTHERN ELEVATION, FROM THE GRAVEYARD—THE CATHEDRAL CHURCH OF LIVERPOOL, LIVERPOOL, ENGLAND. G. GILBERT SCOTT, ARCHITECT.

Choir, the organs woodwork, glass and embroidered hangings, have already been given as memorials and also the marble floor and steps.

At the entrance to the Choir are three steps, at the third bay three, and at the foot of the altar are more, making eight, not including those leading up to the footpace. In the western Choir arch will be the third part of the organ, carried on a single arch springing low down from its piers. This will in no way impede the congregation's view into the Choir but will be a modification of the usual close screen dividing a Cathedral church into nave and Choir, the Choir being properly the Chapel of the Canons for the performance of the Divine Office in the mediæval arrangement. The interior is planned and will be well fitted for carrying out the offices in a dignified and stately way—not a study in dry as dust archæology or liturgical absurdity, nor yet displacing the good and laudable customs gathered from the ages. The large open spaces gently leading up by low wide steps to the altar, the supreme point of the Christian church, will have

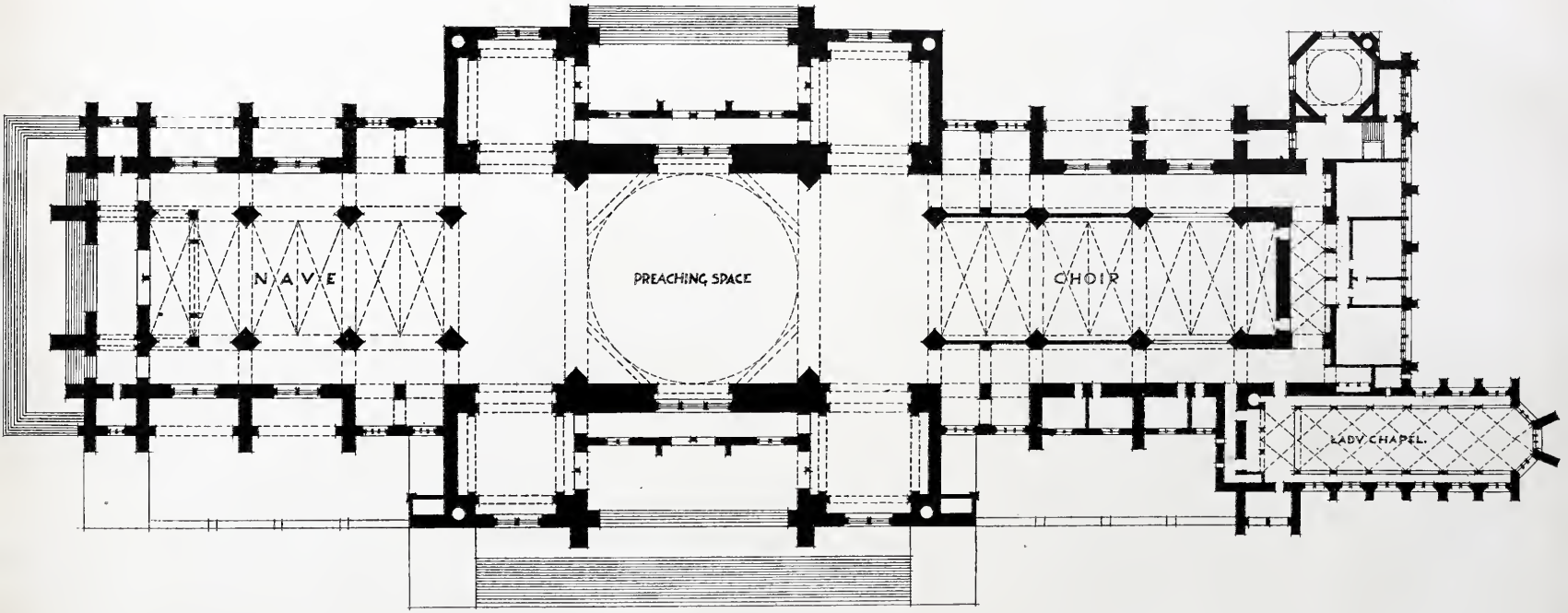


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EASTERN ELEVATION—SHOWING LOWER PART OF CHAPTER HOUSE ON THE RIGHT—LIVERPOOL CATHEDRAL. G. G. SCOTT, ARCHITECT.

LIVERPOOL CATHEDRAL

G G SCOTT ARCHT.
7 GRAYS INN SQ WC.



0 5 10 15 20 30 40 80 120 160 200 240
SCALE OF FEET.

PLAN—THE CATHEDRAL CHURCH OF LIVERPOOL. G. GILBERT SCOTT, ARCHT.



EASTERN AMBULATORY FROM THE TOP.



AMBULATORY AT BACK OF ALTAR—THE CATHEDRAL CHURCH OF LIVERPOOL.
G. Gilbert Scott, Architect.



SOUTH TRIFORIUM LOOKING WEST.

infinite dignity—a modern exemplar of what a Cathedral can and should be, not for concerts or amusements, a mere place of entertainment, but a house of God so impressive and all-embracing as without other means to bring men naturally to their knees and their thoughts to prayer. By contrast it will show that modern man is just as capable as his forefather of producing a vast monument dedicated to religion that shall be at once beautful, inspiring and chaste and not merely of the prettily picturesque order.

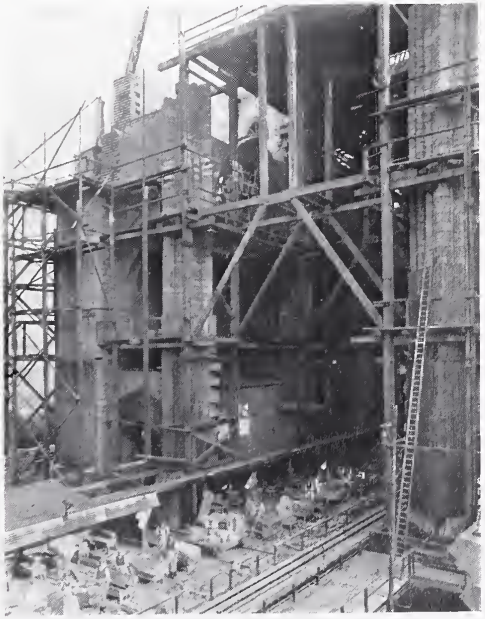
The exterior is simple; one might almost say severe; for many feet from the ground up it is unbroken wall, save for the base mould and buttresses; then it is cut by a parapetted walking way at the same level as that of the interior with which at various points it connects. This walking way passes in front of the east window and runs around the whole Choir.

The jambs of the aisle windows are rounded and on them die the arched head moulds, the label moulds finishing on boldly projecting beasts. On the jambs and centre mullions, which have the form of buttresses three parts of their height, are figures carved from the solid.

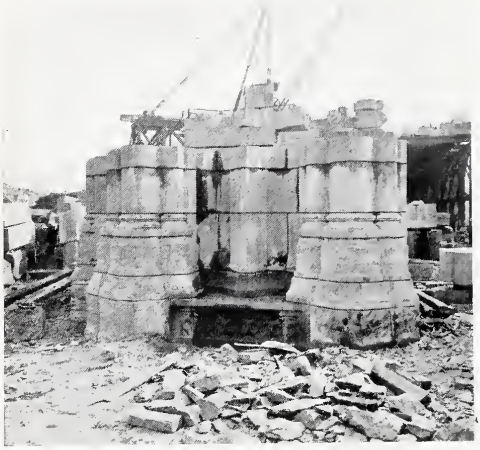
Next over, comes a covered walking way at the triforium level—a small arcade of five arches in each Choir bay and at their level the buttresses terminate in labelled heads and sculptured figures. The wall is continuous up from the inner side of the walking way and rises without break to the parapet, save for the slits lighting the triforium. On either side of the east window are stair turrets capped with extinguishers giving access to the various levels.

The curved exterior surface of the aisle vault is exposed, asphalted, and will form the roof, the pockets acting as gutters to carry off the water. The Choir is to have a copper roof carried on fireproof construction.

The Chapterhouse is on plan an unequal octagon of four large and four small sides rising from a square base. In the basement is the Song School on the level of the Choir vestries. The actual Chapterhouse is at the same level as the north aisle; the windows are in the short sides. From the wide blank sides springs the vault, forming a square which rising is pierced by a 22-foot



CHOIR ARCH FROM PREACHING SPACE.



BASE OF S. E. PIER OF THE N. E. TRANSEPT.

circle, 45 feet above the marble floor. This is open showing the oak rafters of the conical roof. The walls will be panelled to the cell level with oak, and under the vaulting corbels will be carved on the stone large coats of arms with crests and mantelling.

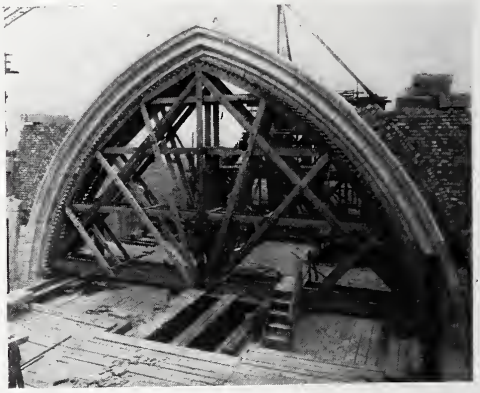
The exterior is without buttresses. On the northeast side is an octagonal stair turret connecting the various levels. The roof is covered with stone slates and capped with a curiously wrought finial of copper.

The Chapterhouse is the gift of the Freemasons of Liverpool in memory of their Past Grand Master, the Earl of Lathom, and would seem by its form and structure to symbolize the craft.



SOUTH CHOIR AISLE LOOKING EAST.

The Lady Chapel is the only part of the Cathedral at present completed and contains for the while the Cathedral of the Bishop. It lies on the south side projecting beyond the eastern wall of the Choir and is in the form of an apsidal parallelogram, with low, narrow lateral aisles, used only as passage ways and seats three hundred people. The entrance is from a porch opening under the gallery at the west end on the right. There are two galleries, one over the other, the first carried on a wide single arch round which is carved an inscription recording the dedication and the names of the families who largely gave the money for the erection of the Chapel. This gallery is for congregational use; over comes the other, containing the organ and organist. It is carried on three



GREAT TRANSVERSE RIB OF THE CHOIR.

slender arches and has a projecting parapet of carved and panelled oak. At the back of the organ from the floor to the apex of the vault and from side to side is oak panelling which acts as a sounding board, aiding without doubt the splendid acoustic properties of the Chapel. On either side up to the apse is a narrow gallery or walking way opening from and at the same level as the first gallery. A solid parapet with a coping of boldly carved lettering carries an open stone screen with cusped heads crowned with a tall, delicate pierced stone cresting, and shuts it off from the Chapel. Projecting from the cornice are small, winged figures carrying musical instruments, no two of which are alike. The

side windows of two lights are set in the aisle wall; the piers are continued across the gallery and are cut by small arches to permit of passage—somewhat similar to the aisles of the Choir.

The vault is a ribbed and groined barrel with carved bosses, a subsidiary rib being developed to form great quatrefoils at the intersections. The floor is of marble, second statuary and Alpine green, left dull and laid in large alternating slabs; across the Chapel at the piers are bands of the same marbles, cut into patterns.

The Chapel is a memorial of holy women; the side and apse windows are filled with female saints, one to each light, and either in their hands or in the background are views or models of the Abbey or Cathedral where each was particularly venerated and where the shrine formerly stood. Below them is foliage with figures climbing about in it, which continues through all the windows, springing from the feet of Our Lady in the central window of the apse; through the heads on scrolls runs the Magnificat.

The windows at the west under the gallery and on the staircase contain busts of eminent English women of modern times, Queen Victoria, Grace Darling, etc. The main windows are the gifts of various people; they bear no laudatory texts—a coat of arms and the name of the family commemorated, simply exposed on a scroll, set in the lower part of the lights, almost hidden from the main floor. The glass is by Powell of Blackfriars, London. It is modern in the best sense and has much of the charm of ancient glass in its variety and its color, but in design is by no means of any period, save the present.

The altar is raised by five low, wide



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LADY CHAPEL FROM THE EAST—THE CATHEDRAL CHURCH OF LIVERPOOL.
G. G. Scott, Architect.

steps above the main floor level. It is twelve feet long and has a series of frontals of the proper colors, designed by Mrs. C. G. Hare of Grays Inn Sq., London, and worked by the ladies of Liverpool and is backed by a carved and painted oak tryptych. The prevailing color is blue in two shades as being proper to a Lady Chapel, with touches of emerald green. The carving is solidly gilt, and the mouldings are picked out with gold and black. The figures are also painted in proper colors and are very charming examples of the modern woodcarver's art.

One must not forget the lighting fixtures for they are not of the least of the charms of the Lady Chapel. They are of iron, painted and gilded, in the form of ostensoria, depending from the high vault by long chains. No attempt is made to hide the bulbs by shades of colored glass or other material, making them try to appear what they are not—merely homely bulbs honestly placed. They and the rest of the hardware and door furniture are by Bainbridge Reynolds of London.

The Choir furniture, sedilia, etc., is of English oak from the shops of the general contractor, except the tryptych, and was carved by Mr. J. H. Phillips, who is also responsible for much of the stone carving. It is solidly constructed with mason joints and put together with pegs. The finish is a silvery gray, produced by a treatment with lime, which also slightly roughens the surface. This gives it a character in keeping with the rest of the Chapel.



LADY CHAPEL VAULTING FROM THE TOP—THE CATHEDRAL CHURCH OF LIVERPOOL.
G. Gilbert Scott, Architect.

On the exterior, the Chapel rises from a solid weathered base, projecting just beyond the face of the buttresses. On the south side to the west is the large vaulted two-storied porch. It is entered

by a flight of steps leading up from the street through a low, wide arch. The next story is divided into two open arches, a pier being built over the apex of the lower arch. This rises to a considerable height and has a little below the centre a pair of niched figures, carved from the solid. Through these arches is seen high up the oak boards, rafters and crested purlins of the roof. The exsides, dying on the jamb moulds. The buttresses terminate in gable heads, set in which are shields bearing various devices. Then again just below the parapet and over the buttress heads comes another parapetted walking way at the same level as the first on the Choir and that round the roof of the Chapterhouse. These are all connected together by a bridge or other means and allow of con-



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LADY CHAPEL VAULTING—THE CATHEDRAL CHURCH OF LIVERPOOL.
G. G. Scott, Architect.

terior is covered with stone slates like the Chapterhouse.

Piercing the buttresses and at the same level as the interior lower gallery is a walking way running from the porch gallery or tribune, carried on arches round the apse and circumambulating the exterior of the Chapel. The windows fill the entire space between the buttresses, whose small, frequent face weatherings are continued down the tinuous passage. The roof over the vault, invisible except from above, is of English oak, covered with copper. The stones used in building are red sandstones of various hues from several different local quarries. The prevailing tone is a dull red—in some lights it becomes pink—and the gray mortared half-inch joints, yellow . The whole of the cutting, the mouldings and the facing is done by hand, saws being the only ma-



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INTERIOR OF THE LADY CHAPEL—LOOKING EAST—CATHEDRAL CHURCH OF LIVERPOOL. G. GILBERT SCOTT, ARCHITECT.



By permission of Messrs. Morrison & Sons.

INTERIOR OF THE LADY CHAPEL LOOKING WEST—CATHEDRAL CHURCH OF LIVERPOOL. G. GILBERT SCOTT, ARCHITECT.



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LADY CHAPEL—NORTHERN ARCADE LOOKING WEST—CATHEDRAL CHURCH OF LIVERPOOL. G. GILBERT SCOTT, ARCHITECT.

chinery used and they only for severing the large pieces of stone into the desired sizes.

The stone facing is nowhere less than one foot, and all walls of three feet and under are built solidly of cut stone. The brick bond used is old English, the bricks being laid with an equal perfection, whether viewed or no. As the work proceeds, the walls, brick and stone alike, are thoroughly and constantly wetted, so that the mortar may not dry too quickly. The interior stone work as completed is "slurried," that



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DOOR TO LOWER VESTRIES FROM CHAPEL—CATHEDRAL CHURCH OF LIVERPOOL. G. GILBERT SCOTT, ARCHITECT.

is, covered with a mixture of lime and sand to protect it from the smoke and weather.

The average number of men employed is about two hundred. It is thought that at the present rate of progress, provided the money is forthcoming, another twenty years will see the Cathedral completed. It is being built by public subscription and gifts, the money in hand being about sufficient to maintain the work for another two years.

There is no contract, the builders being paid on a fixed schedule of prices as the work proceeds. Messrs. Morrison & Son of Wavertree are the contractors.

The writer wishes to express his thanks to Mr. Green, the Clerk of works, to whose patience and trouble he is largely indebted for the information contained in this article.

Mr. Scott is to be congratulated on his craftsmen and the skill with which he has chosen them. All the work is full of individuality and charm (without freakishness), workmanlikeness and labor lovingly performed. As to the style, it is difficult to speak—Gothic in the large sense of the word—but not to be confounded with any particular one of the tabulated styles. It shows familiarity with and study of ancient forms, but it is no diatessaron of undigested parts collected at haphazard fancy and flung together in the mode of the Gothic Revival and spoken of as of this or that particular period or century.

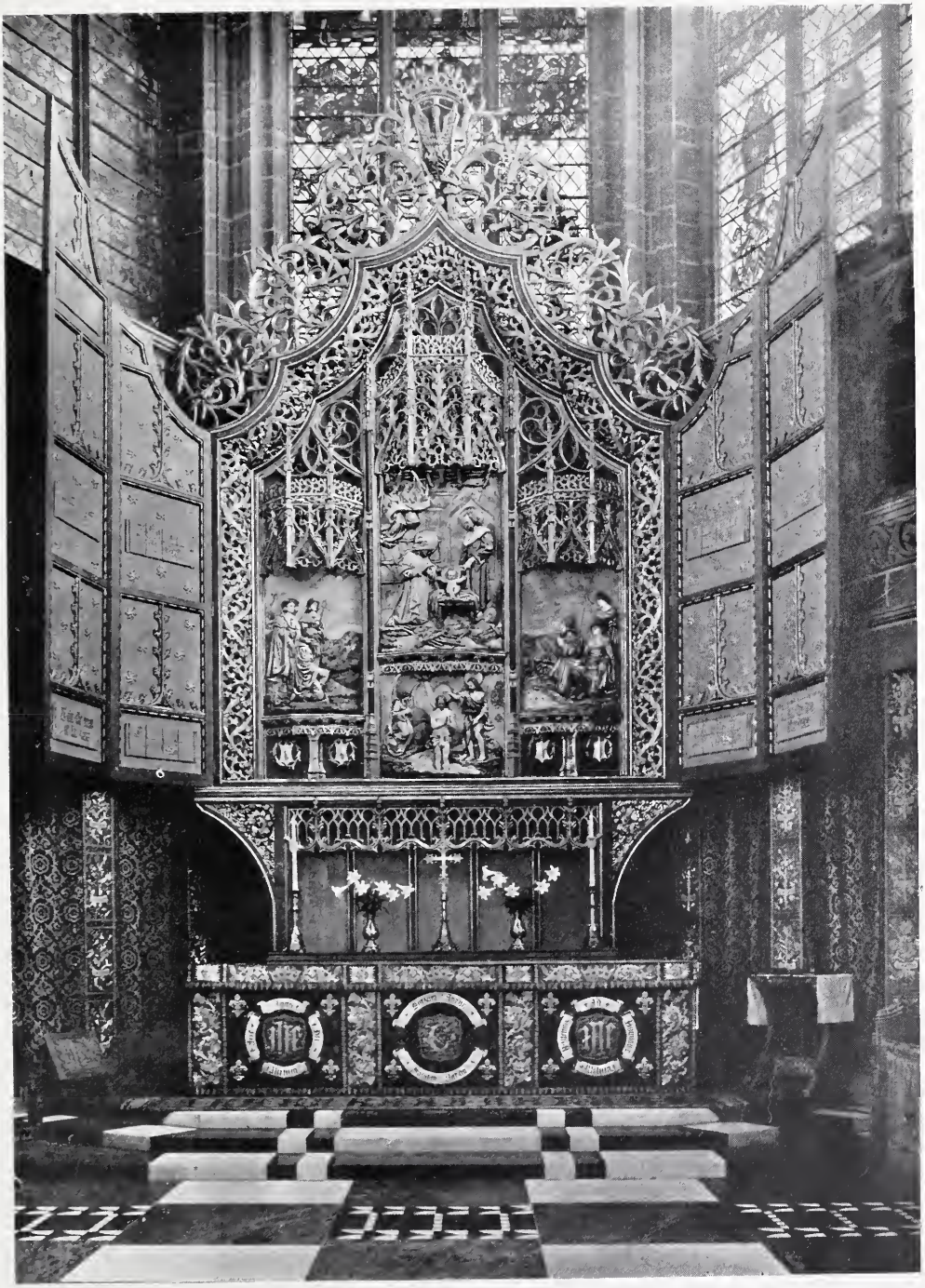
It is modern of the twentieth century, of to-day, thoroughly digested, and has been tied by no style—an example of living modern architecture as applied to a religious problem—religion, from whom the art of architecture had its being, for whom it was invented and developed. Modern method facing and solving an ancient problem.

Liverpool and Westminster Cathedrals are both well worthy to go down to posterity as examples of twentieth century ecclesiastical art and will stand forever, unashamed when viewed in conjunction with similar monuments of past ages of any country.

THE CATHEDRAL CHURCH OF LIVERPOOL

GENERAL DIMENSIONS.

Length of Choir inside	150′
Width of Choir inside	47′
Width of Choir aisles	13′ 6″
Width of choir and aisles	86′ 9″
Width of Choir and aisles (extending from face to face of buttresses)	144′
Width of transepts (extending from face to face of buttresses)	230′
Thickness of arcade walls	6′ 4½″
Thickness of aisle walls	6′ 1″
Length from east to west (internal)	480′
Length from east to west (external)	600′
Central preaching space	200′ x 80′
Height from nave floor to cap of arcade	55′ 7½″
Height from nave floor to cap of transverse arch	84′
Height from nave floor to apex of Choir vault	115′
Height from nave floor to apex of triforium vault	119′
Height from nave floor to apex of aisle vault	80′
Height from nave floor to cell of east window	46′
Width, jamb to jamb, of east window	36′
Height of glass in cast window	76′
To cell of aisle window	41′
Jamb to jamb	15′ 3½″
Height of glass	37′



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ALTAR AND TRYPTYCH IN LADY CHAPEL—CATHEDRAL CHURCH OF LIVERPOOL. G. GILBERT SCOTT, ARCHITECT.



Photo by The Raney Studio.

THE PEOPLE'S SAVINGS BANK OF CEDAR RAPIDS, IOWA. LOUIS H. SULLIVAN, ARCHITECT.

THE PEOPLE'S SAVINGS BANK OF CEDAR RAPIDS, IOWA

LOUIS H. SULLIVAN, ARCHITECT

BY MONTGOMERY SCHUYLER

THERE IS NO DENYING that a new work by Louis Sullivan is the most interesting event which can happen in the American architectural world to-day. There has been nothing like the professional interest which his works inspire since Richardson ceased to produce, a quarter of a century ago. The succession of Richardson's works was indeed followed with more of professional attention, and for an obvious reason. The architectural profession, meaning a large majority of the active and ambitious practitioners of architecture, attended to the series of works which Richardson produced during the decade to which his professional activity and conspicuousness were confined, for the purpose of imitating, or at least of applying them in their own practice, in so far as they were imitable or applicable, and often further. The interest was thus selfish and practical, as well as disinterested and artistic. But Mr. Sullivan has few imitators. His "school" consists of a few disciples only, of one only whose discipleship has produced very noticeable or memorable works. In the October number of THE ARCHITECTURAL RECORD there were illustrated in conjunction a country house by the master and another by the pupil. The *Western Architect* of Minneapolis was moved by the conjunction to remark that while Mr. Sullivan's genius "permits him to do the most daring things in design and 'get away with it,'" of his followers "none have gone so far into the realm of the picturesque, or failed so signally in the production of livable houses, as Frank Lloyd Wright." We by no means quote these remarks as concurring with them, and at least as little as marking them for animadversion, but merely to show the impression the contrast makes upon an apparently intelligent and candid mind. There is, to recur to our own comparison, this marked difference between the interest inspired by the works of Richardson and those of Mr. Sullivan that in the latter case there are no "by-ends." Richardson might have said of his architecture, even while he was still practising it, as Tennyson said of his poetry, even while he was still writing it—

> Most can grow the flowers now,
> For all have got the seed.

In fact, many things were done during the prevalence of the Richardsonian Romanesque that the master need not have been ashamed to sign, and many which require external evidence to show that he did not do them. Not one such example can be cited of Mr. Sullivan's work. The architect who studies it with a view to getting from it any hints that may be available in his own practice will have to abandon it with the melancholy admission that there is nothing in it to steal. He has not, of course, nobody has, the pretension to rival its author as a master of decorative design. If an equal genius in that kind should haply arise, he would do something very different. But what is true of the decorative design is as true of the architectonic "layout." Every one of his buildings is the solution of a particular problem, and the result is a highly specialized organism, which is as suitable for its own purpose as it is inapplicable to any other. It is as inimitable in the mass as in the detail. Hence is the interest which architects nevertheless continue to take in it disinterested, so to speak, their admiration free from any notion of direct ap-



DETAIL OF CHIMNEY TOP—THE PEOPLE'S SAVINGS BANK.
Louis H. Sullivan, Architect.

propriation. To go and do likewise would, in this case, mean to go and do something entirely different, as different as the conditions and purposes of the second building would, upon patient analysis, reveal themselves to be from those of the first. Nay, the author of the first shows an impossibility or an impatience of repeating his own design where the commonplace architect would think that a very slight rehandling of a design already approved in one case would serve perfectly for the other. For example, Mr. Sullivan built a bank three years ago in a Minnesota village, The National Farmers' Bank of Owatonna, Minn., which was fully illustrated in THE ARCHITECTURAL RECORD for October, 1908, and was presently acclaimed by architects the country over as a signal success, the acclamation being produced, naturally, by an inspection of the photographs. Owatonna suddenly found itself famous, and became the Mecca of architectural pilgrimages. At the last report, twenty-five strangers a day were visiting Owatonna expressly to inspect it. An architect who had won such a success with his first bank, and thereby been invited to do another bank, might in such a case, if in any case at all, have held himself justified in "standing on his attainment" and merely executing variations on his original theme. But what has the People's Savings Bank of Cedar Rapids, just now completed, in common with The Farmers' Bank of Owatonna, completed three years ago, excepting that it is a highly individual building? It owes nothing in plan, nothing in composition, nothing in detail, to its predecessor. It is, so to speak, grown from its own seed, and recalls the remark of another American architect that if one has faithfully studied and interpreted the requirements of his structure, expressional as well as practical, and faithfully followed them out, then he does not so much "design" his building as he "watches it grow."

The People's Savings Bank, then, consists, essentially, of a central space or main banking room, roughly 25 by 50,



DETAIL—STOP OF SILL COURSE—THE PEOPLE'S SAVINGS BANK.
Louis H. Sullivan, Architect.



Photo by The Raney Studio.

DETAIL OF STREET LAMP AND SILL COURSE—THE PEOPLE'S SAVINGS BANK, CEDAR RAPIDS, IOWA. LOUIS H. SULLIVAN, ARCHITECT.

which is described, rather awkwardly, as a "public lobby," whereas, according to Johnson, a lobby is "an opening before a room," while this is the central and nucleal apartment. It is surrounded by subordinate rooms, of a single story, which expand the total dimensions of the ground plan to 50 by 90, or thereabouts. These comprise the vestibule to the main room, the quarters of officers and clerks on each side of it, the vault at the back of it. But all these are the appendages of the business done in the main central room, which they would darken if they were of the same height with it and if it received its light only from the outer walls. The clerestory, then, is a practical necessity for the illumination of this room, while at the same time the most natural means of signalizing it and giving it the architectural predominance its importance deserves. The blank space accruing under the windows of the clerestory, what, in church architecture, would be the triforium, offers a most tempting expanse for mural decorations where they can be best seen on the one hand and best lighted on the other.

The building is thus clearly designed from within outward. The exterior is the envelope of the interior reduced to its very simplest expression. The simplicity and austerity of it will surprise those who look for fantastic decoration in Mr. Sullivan's work, and who wonder how he could have denied himself all the opportunities of doing what he can do so much better than any other living architect. Even in the bank at Owatonna, of which the masses are stark and severe enough, there are cornices, there are cordons which give lines of light and trenches of shadow, while the spandrils of the great arches are bordered with delicate detail in terra cotta, and at the corners of them the artist has allowed his fancy, elsewhere severely curbed, to effloresce in ordered masses of elaborated ornament. But of these things hardly a trace is in the newer building. The protrusion of the square mass at the centre, with the chimney at each of the four corners, which, as we have seen, is the direct outgrowth of the utilitarian plan, gave this central feature so much resemblance to the central "keep" of a mediæval castle that the temptation would to most designers have been irresistible of heightening this resemblance by some detail of military Gothic. But this is not a feudal castle of the twelfth century but an American bank of the twentieth, and to this designer the temptation to a romantic falsification may not have presented itself at all. So far, of course, so good; if he had been one of the rehashers of the old forms, he would by no means have justified the interest which he has excited. But the structure does not always abound even in its own sense. It seems to present at some points an arrested development, an incomplete expression. It is an old remark about Mr. Sullivan's work, in response to those critics who would like to dismiss him as a "decorator," that his sense of the disposition and relation of masses is as unfailing as his sense of grace and beauty in ornament, but that, between the general arrangement of the masses and the decorative development of the detail, there is the functional modelling of the masses, and that this intermediate point of design is liable to be slurred in his work. That remark might be cited with respect of this exterior. The projection of a course in stonework, or the successive projection of several courses in brickwork to serve the practical purpose of sheltering the wall from the weather and the artistic purpose of crowning it with a "finis," although so universally practised in all historical architecture, may be argued to be not a logical necessity, though to most beholders it will seem to be at least a rhetorical necessity. But at any rate a brick wall cannot cope itself but requires a crowning coping, and the satisfaction of this requirement offers a legitimate subject for architectural expression. It was supplied with signal success in the bank of Owatonna. To have supplied it here would have relieved the starkness of the outline of the walls both of the substructure and of the clerestory, without at all compromising, as it seems,



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LOOKING NORTH IN LOBBY TO ENTRANCE VESTIBULE—THE PEOPLE'S SAVINGS BANK, CEDAR RAPIDS, IOWA—MURAL PAINTING, "FALL EVENING." LOUIS H. SULLIVAN, ARCHITECT.

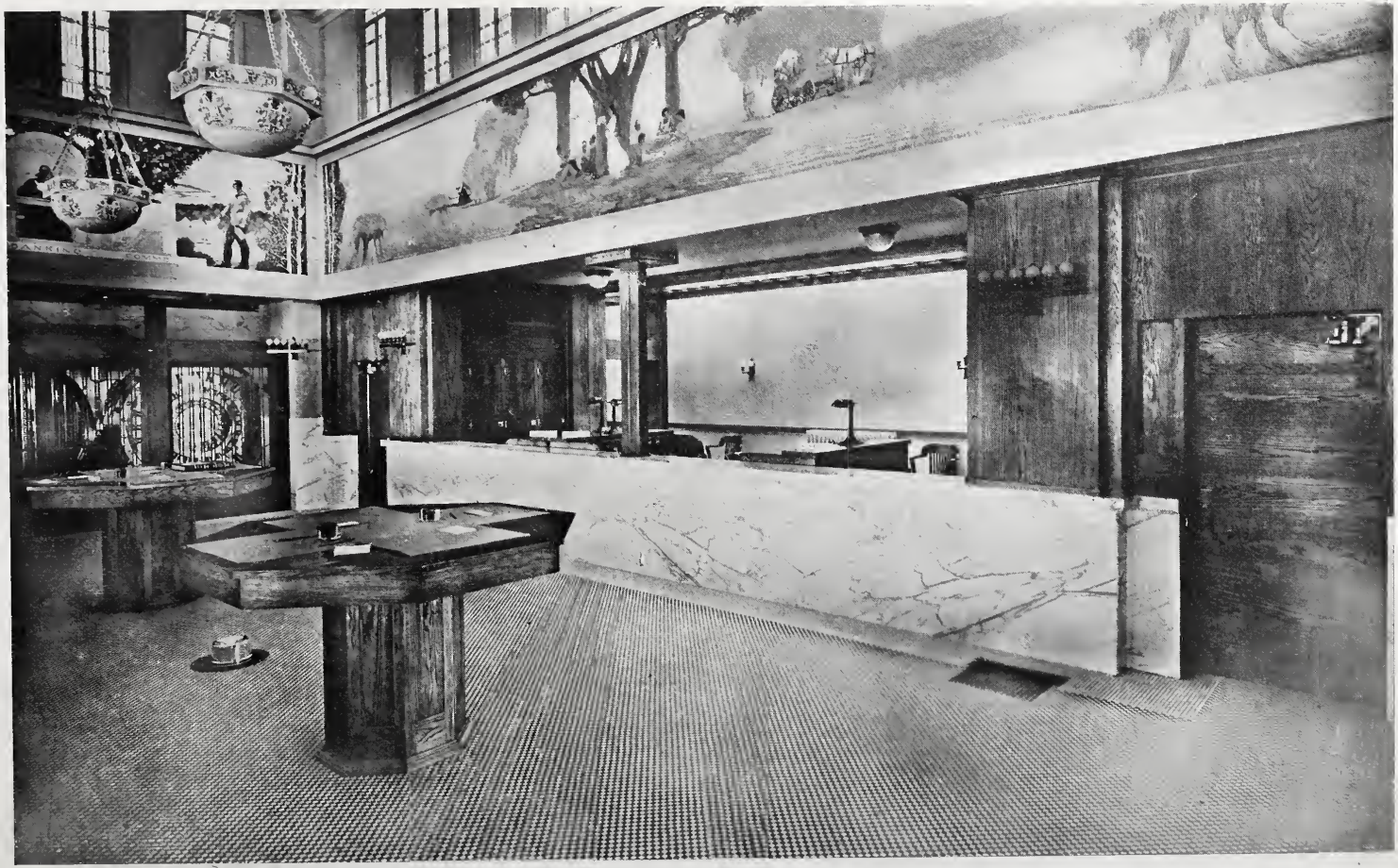


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LOOKING WEST INTO OFFICE QUARTERS—THE PEOPLE'S SAVINGS BANK, CEDAR RAPIDS, IOWA—MURAL PAINTING, "SUMMER NOON." LOUIS H. SULLIVAN, ARCHITECT.

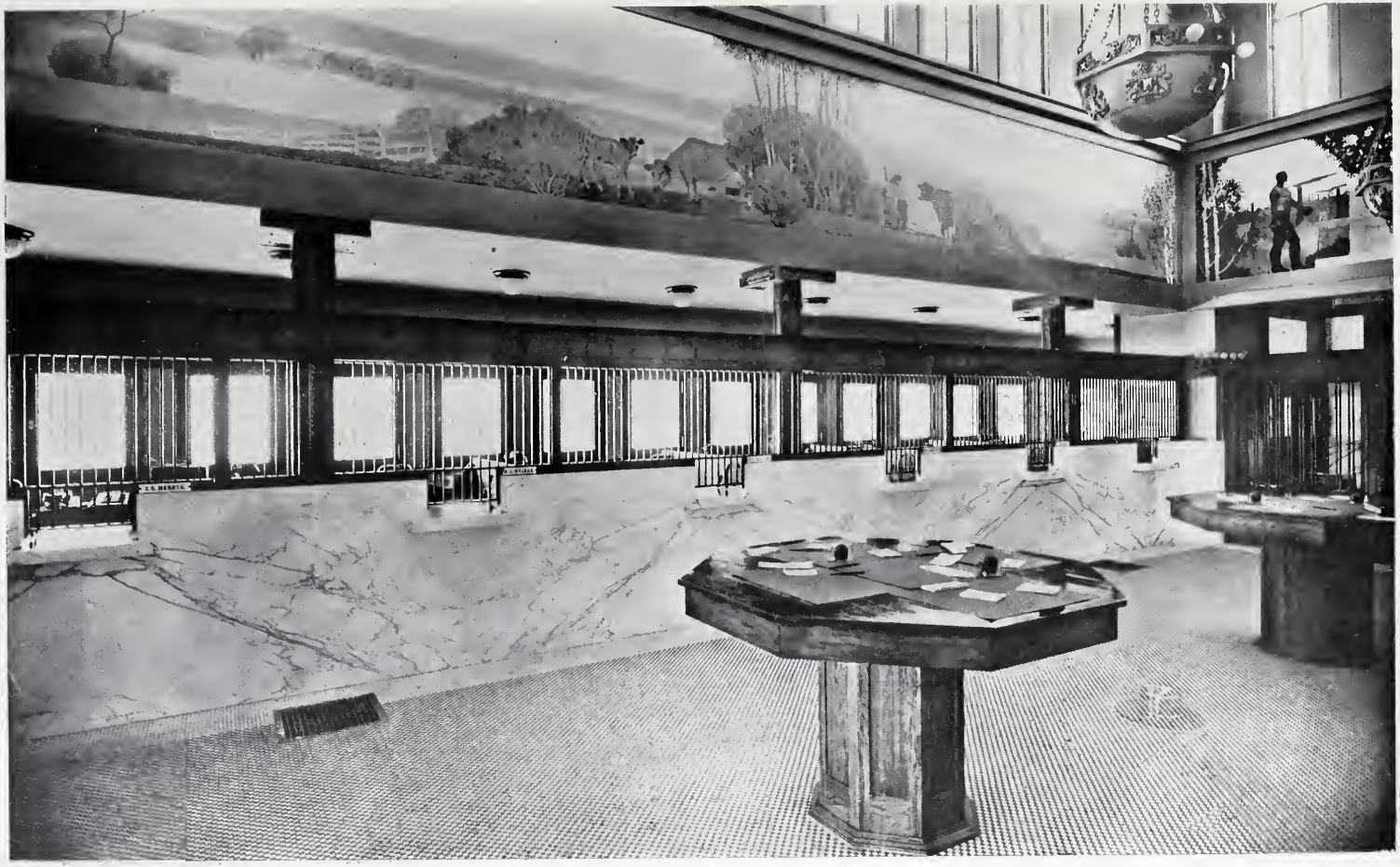


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LOOKING EAST—TELLER'S QUARTERS AND WORKING FORCE—THE PEOPLE'S SAVINGS BANK, CEDAR RAPIDS, IOWA—MURAL PAINTING, "SPRING MORNING." LOUIS H. SULLIVAN, ARCHITECT.

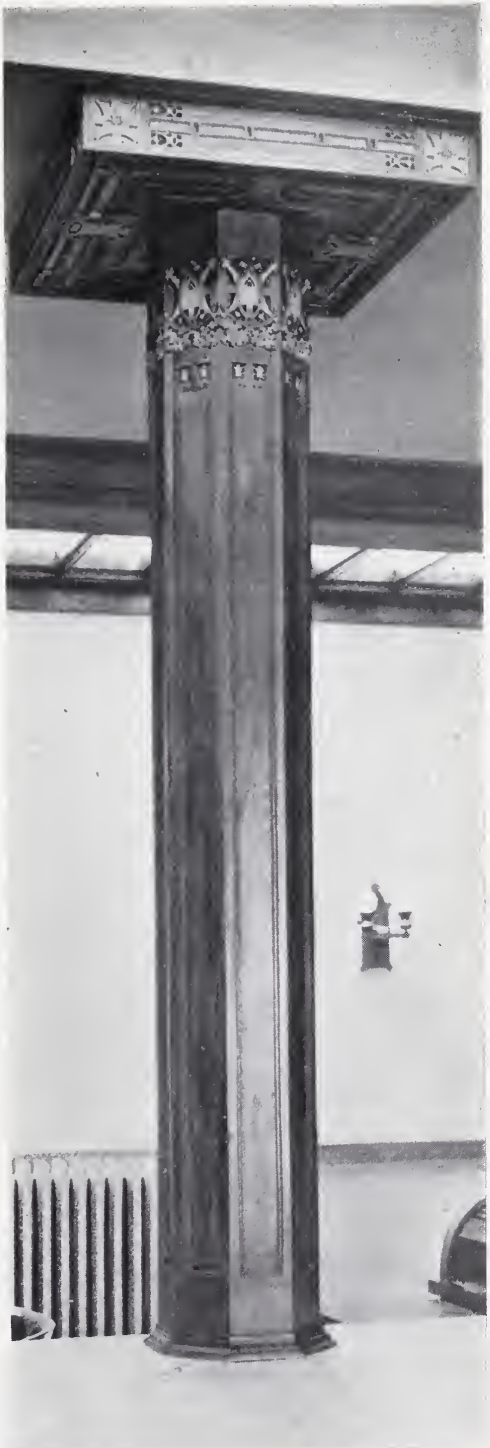


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LOOKING SOUTH ACROSS LOBBY TO GRILLES AND VAULT—THE PEOPLE'S SAVINGS BANK, CEDAR RAPIDS, IOWA—MURAL PAINTING, "INDUSTRY—BANKING—COMMERCE." LOUIS H. SULLIVAN, ARCHITECT.

and even while promoting the rationality of the treatment. As it is, the only relief supplied to the absolute plainness of brick wall is in the grotesques which serve as finials to what are apparently prolongations into the clerestory of what, in ecclesiastical architecture, would be the "nave piers," the principal points of support of the clerestory walls, and in the panels of ornament which fill the emergence of the chimneys above the clerestory walls.

The views of the interior furnish material for a real appreciation. And, indeed, it seems clear that, in the mind of the architect, the interior is "the thing" and the exterior reduced to becoming its simplest expression. The modern American conception of a bank is very different from the old-fashioned conception, derived from Europe, in one respect which is particularly important to its architecture. The old-fashioned bank was a temple of Plutus, hedged and guarded with as much mystery as if it had been a temple of Isis. You could put your money in or even, ordinarily, get it out, in the light of day, being divided from the officiating teller only by a grille which was supposed to protect from your ravages the treasures of which he was the guardian. But the high priest of the temple was in some remote and hidden apartment, to which you could penetrate only by a series of diplomatic pourparlers. Now the game of finance is played openly, "cards on the table," and there is no mystery hedging the president or the cashier any more than the least considered of their subordinates. Every modern bank recognizes this difference more or less in its design, but few modern banks so completely as this in Cedar Rapids. There is, indeed, a "Consultation Room for Officers," and this apartment has a door which on special occasions can be shut. There are similar rooms in which the customers of the bank can transact their private business. But with these exceptions whoever enters the bank can see through it from end to end and from side to side. Even the vault is thrown open to sight during business hours and becomes an impres-



DETAIL OF COLUMN IN BANKING ROOM—THE PEOPLE'S SAVINGS BANK.
Louis H. Sullivan, Architect.

sive element in the architectural ensemble, with its circular door, seven feet in diameter, twenty-two inches in thickness, and twenty-five tons in weight. Every wicket and every desk even bears on the tablet the name of the official on duty at the moment. "Fiat lux" is evidently the motto of the whole establishment, as of its architecture. This, one feels, is the habitation of a highly organized and highly specialized machine, in which not only provision is made for every function, but expression given to every provision.

The absence of what we have called functional modelling is as marked, almost, in the interior as on the exterior. If it be not so noticeable, that proceeds from a circumstance which here explains and tends to justify the omission. The material itself of this interior is of great beauty and great sumptuosity. The marble of the counters, the oak of the partitions have evidently been carefully sought with reference to their decorative effect, and sought successfully. Material of this kind shows to the best advantage when employed in unbroken surfaces as extensive as may be. One willingly foregoes, in such expanses, the moulded framing of the marble, the panelling of the woodwork. But elsewhere and throughout it is evident that a square arris has no terrors whatever for this designer and that he willingly omits what to the designer of another school, to the designer, we may say, of any "school," would be the irreducible minimum of "finish." This is seen in the detail throughout, in the joinery of the counters, in the framing of the mural pictures, in the "trim" of the subordinate rooms. And the willingness to forego traditional transitions and modifications is as evident in the columns, which are hardly columns, of which the capi-



Photo by The Raney Studio.

OFFICERS' QUARTERS—THE PEOPLE'S SAVINGS BANK.
Cedar Rapids, Iowa. Louis H. Sullivan, Architect.

tal that mediates and forms a graduated transition between the shaft and the abacus is an essential member, but rather posts, upon which the spread of the abacus is directly superposed, or rather interposed, for the posts which carry the clerestory walls are "produced" into the strips of pier which we have seen terminating in the grotesques of the exterior. Even so, it must be admitted that some form of capital, either

velopes of the structural steel posts, the detail of the faces and of the soffits of the abaci, the incrusted ornament of the electroliers, have that personal and incommunicable quality which makes their author's decorative detail so fantastic and delightful.

Evidently Mr. Philbrick's mural paintings are an integral element of the architectural design. Excepting the figures at the end of the main room opposite the



Photo by The Raney Studio.

PART OF MEN'S ROOM—THE PEOPLE'S SAVINGS BANK.
Cedar Rapids, Iowa. Louis H. Sullivan, Architect.

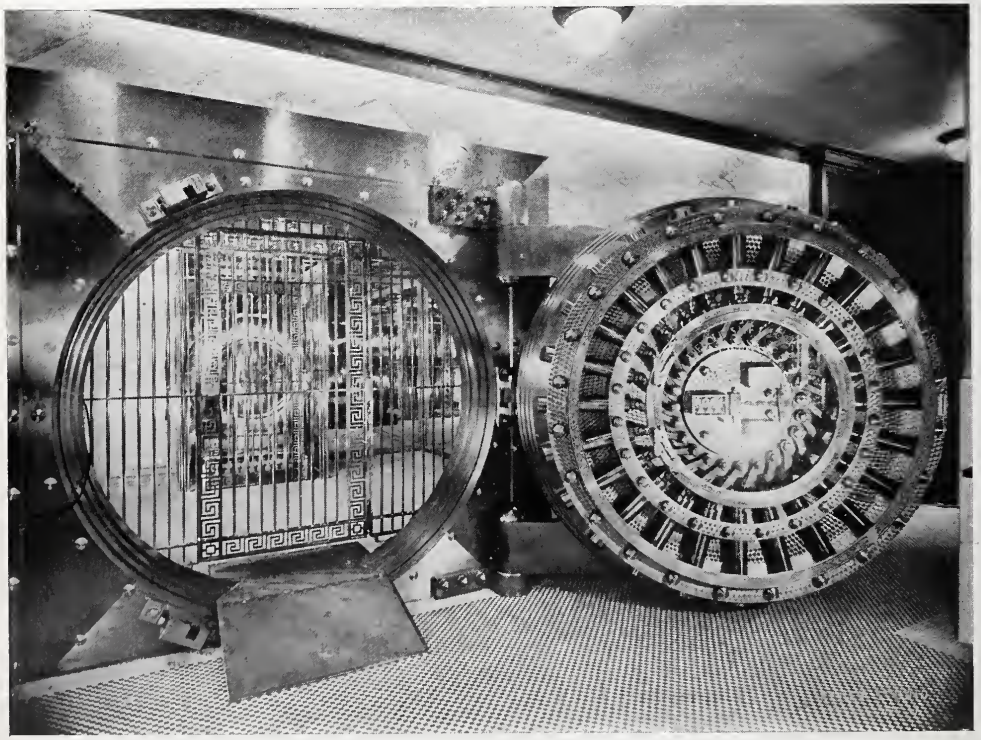
the swell of a bell in stonework or spreading braces in wood or metal, supporting and relieving the abacus, is demanded not only by tradition but by the the nature of the construction, and that the omission of it is a lapse in structural logic.

On the other hand, such strictly technical and architectural decoration as is sparingly introduced suffices to make one wish that it had been introduced more freely. The necking of the wooden en-

entrance and above the entrance to the vault, in which Industry and Banking and Commerce are symbolized, and symbolized effectively, these are representations renouncing allegory and aiming to depict the agriculture which so nearly engrosses the activity of Iowa. The photographs enable one to judge of the pictures in their design and to see how effectively they complete the architecture in which they are set and what an admirable setting the architecture provides

for them, both practically in its perfect and abundant illumination and artistically in making them contribute to the force and effect of a single and total impression, to which each of the allied arts invoked bears an integral and organic relation.

Undoubtedly the building has a physiognomy and an individuality. Whatever else one may be moved to think about it, he must confess that in this respect it is a refreshment, at a time when individuality is so infrequent in any department of American building and rarest at all in our commercial building. When the graduates of the Beaux Arts came back to go to work as "single spies," when Hunt came back, when Richardson came back, when Mr. Sullivan came back, they were content to employ their foreign training to giving American solutions to American problems. Now that they are coming back "in battalions" so many of them seem bent upon importing the solutions, and even the problems, that it sometimes appears as if in our commercial and public architecture we should be reduced, as Johnson complained that English writers of his generation were in danger of being reduced, "to babble a dialect of France." To those of our Beaux Artists who look across the water both for their inspiration and for their appreciation, it must have been rather a blow that, at the World's Fair in Chicago, Mr. Sullivan's Transportation Building, which some of the classicists his colleagues, so strongly deprecated and resented, should have been the only erection which was worth to its designer the medal of a French artistic association. It is no wonder that this bank in Cedar Rapids, like its predecessor in Owatonna, should already be drawing its "twenty-five strangers a day" expressly to visit it.



SAFETY DEPOSIT VAULT AND DOOR (Weight, 50,000 pounds; 22 inches Thick)—THE PEOPLE'S SAVINGS BANK.

Cedar Rapids, Iowa. Louis H. Sullivan, Architect.



EARLY AMERICAN CHVRCHES

PART II

ST. PETER'S, PHILADELPHIA, PA.—FARMINGTON, CONN.—CHRIST CHVRCH, HARTFORD, CONN.—OLD SWEDE'S CHVRCH, WILMINGTON, DELAWARE.

BY AYMAR EMBVRY II



St. Peter's Church was begun as a chapel to Christ Church in 1758. It was built on land given by two sons of William Penn, and it may be interesting to note that two sons of such a prominent Quaker as Penn, were Episcopalians. The building of the church was due to the fact that Christ Church began to be overcrowded, and in 1758 the vestry record that "it is unanimously agreed that the taking and collecting the subscriptions and conducting the affairs relating to the building and furnishing the said intended church shall be under the management of the minister, church wardens and vestry of Christ Church." I have been unable to find the name of the architect with any certainty, although it seems probable to me that Samuel Rhodes was the designer. It was built during the years 1758-61 and was maintained as a chapel to Christ Church until 1832, when its separation from the parent body was effected. The building is of considerable size (sixty by ninety feet) and both in the exterior and interior possesses marked architectural interest, although one regrets to learn that the very excellent tower and spire were added in 1842, from the designs of William Strickland, a well known architect of that day. It is, however, very sympathetically conceived and was in a sense an extension of the original design as the lower part was originally a cupola with two small bells. The extension to the tower was made partly from a matter of sentiment and partly because a full chime was then presented to the church. The interior is of especial interest because of its peculiar and unusual plan, in which the pulpit is placed at one end of the building backing against the tower, while the reredos is at the other directly across the triple window shown in the photograph of the exterior. There is no principal entrance to the church, but two small doors at each corner lead to a vestibule through which the body of the church is reached. The ceiling is a flat barrel vault with two secondary arches piercing it each side of the pulpit and a single arch over the reredos. The interior, including the stone flag floor, remains practically in its original condition, and the old pews are undisturbed.

MEETING HOUSE

FARMINGTON, CONN.

The old Meeting House at Farmington is generally considered one of the best in New England. It was constructed in 1771, being the third house of worship erected in Farmington, and its location was then changed from the centre of the street, where the other two structures had been, to the side, according to a custom which was only at that time beginning to form in New England. Most of the older churches in New England have been square hipped roof structures with somewhat of an auditorium plan, and the plan was in this building continued, although the gable roof and tower lent an appearance of length in conformity to the modern idea. The principal entrance remained, however, at the centre of the long side with a small entrance into the tower from which a



INTERIOR OF ST. PETER'S CHURCH (P. E.), PHILADELPHIA, PENNSYLVANIA.



ST. PETER'S CHURCH (P. E.),
PHILADELPHIA, PENNSYLVANIA.

staircase led to the galleries. The building was designed by Captain Judah Woodruff and was, so far as I can learn, his only effort at church design, although he was the designer (and the builder as well) of a number of excellent residences in Farmington and its vicinity.

Perhaps the most interesting feature of the church is the belfry supported on eight slender columns; the lightness of the construction of this tower is of appearance only, since what appear to be columns are in reality the tops of long posts which run down through the main body of the tower for about twenty-five feet and are cross-braced and tied together, making a construction so firm that it has stood without radical repairs since it was erected. An interesting detail of the construction of this tower, which indicates that its designer thought it necessary to use the utmost care in the construction, is that the heads of the hand-wrought bolts which are used to tie it together, are marked to correspond with marks on the edges of the holes through which they were driven. The construction of the remainder of the church was of the same excellent character; even the ridge pole has a sag of only one and a half inches in the whole length of the church, while it is also stated that about half the shingles and practically all the clapboards are those originally used. The interior has unfortunately been somewhat remodelled; the curious turned wooden posts, which support the gallery, and the slip pews were put in place about 1860, and the organ with the decoration around it was of the same date, although the pulpit is the original one. The design was, I understand, copied from that of a similar church at Wethersfield.

CHRIST CHURCH

HARTFORD, CONN.

The present building is the home of one of the oldest congregational churches in Connecticut. The original meeting house of this congregation was built in 1636 on what is now State House Square but was occupied only five years. The second church stood for over a hundred years and was designed by one Colton Palmer of Warwick, Rhode Island, who is, so far as I know, the first architect of this country whose name has been preserved. The old building became dilapidated, and the congregation was outgrowing it when in 1804 a committee was appointed to consider a new building. The old building was sold in December, 1805, and the new building was begun in 1806 and completed in 1807, the congregation in the meantime occupying a theatre from which Theatre Street gets its name, and in the history of the church it is stated that alcoholic stimulant in considerable quantity assisted the speed of the erection.

Both the interior and exterior are in design among the most ornate of the early American churches; the drawings, or at least the sketches, were made by one of the members of the congregation, Daniel Wadsworth, the so-called "Maecenas" of Hartford. The tower is of considerable interest, the lower seventy feet being of brick and the remainder of wood, the only order used in the tower, as well as those of the portico and the interior, being Ionic. The interior is certainly one of unusual charm; and, although the columns used are of extraordinarily slender proportions, the attenuation does not seem to have produced any appearance of instability. The plan is a very simple one, consisting of a nave with aisles under the galleries, the nave vaulted with a coffered barrel vault.



MEETING HOUSE,
FARMINGTON, CONNECTICUT.



MEETING HOUSE,
FARMINGTON, CONNECTICUT.



INTERIOR OF FIRST CHURCH OF CHRIST,
HARTFORD, CONNECTICUT.



OLD SWEDES CHURCH,
WILMINGTON, DELAWARE.



OLD SWEDES CHURCH,
WILMINGTON, DELAWARE.

TRINITY CHURCH

WILMINGTON, DEL.

THIS CHURCH, better known as "Old Swedes," was built by Swedish settlers at Wilmington in the latter part of the seventeenth century and was dedicated on Trinity Sunday, 1699. The question as to whether the tower was or was not a part of the original design is not known; the difference in the materials suggests it was probably added later, although the inclusion of a certain amount of brickwork in the body of the church indicates the possibility that it was erected at the same time. The church is sixty feet long and thirty feet wide, the walls twenty feet high, built of granite laid in clay and pointed up with lime mortar. The constructors, in order to insure durability, made the foundation wall six feet thick, while the superstructure at the windows was three feet thick. The plan is rather interesting, since the portion of the building to the right of the doorway is the full height of the building, while a small gallery extends across nearly half the church at the left and is reached by a staircase, partly exterior and partly interior, beginning in the entrance porch. While it is, perhaps, not architecturally a very extraordinary piece of design, it is one of the most interesting of all the older churches and is in fact one of the dozen oldest which have been preserved.

[EDITOR'S NOTE—There began in the December issue of THE ARCHITECTURAL RECORD the first group of "The Early American Churches." Four examples will be published each month until such time as the subject is completed.]





FIRST CHURCH OF CHRIST,
HARTFORD, CONNECTICUT.



FIG. 1—SHOWING CONCRETE USED IN THE CONSTRUCTION OF A PORCH BALUSTRADE.



ARCHITECTVRAL TREATMENT OF CONCRETE STRVCTVRES



PART IV

CONCRETE IN LANDSCAPE GARDENING

BY M. M. SLOAN

FROM THE ANCIENT DAYS of Greece and Rome the architect and artist has paid particular attention to the improvement of the surroundings of important buildings and structures, and the extent to which landscape gardening has been developed has kept pace with the wealth of the country.

In the Colonial days of this country the available wealth was limited, and only a few of the larger landholders attempted to beautify their lawns and gardens. What was done in this respect in the early history of the country was principally in the construction of walks, the care and attention to the trees, and the planting of old-fashioned flowers and hedges to enhance the approach to the Colonial mansion.

If any attempt was made to use other than the natural foliage, it principally consisted of terraces and rough stone walks which could be constructed readily by unskilled labor, though not infrequently some attention was paid to the approach to the driveways, thus copying the entrances to the old estates of England. Some of these places are still left intact in this country and have a beauty which is difficult to rival.

As time passed, the country went through a period of inartistic attempts with ineffectual materials to improve the appearance of lawns and the landscape approaches to houses and estates. So it was that forty years ago the first signs of approaching prosperity were indicated by cast-iron dogs in various positions, painted lead color, guarding the walks or approaches. The more pretentious attempts consisted of marble or terra cotta statues scattered promiscuously throughout the groves and lawns, leaving much to be desired with regard to the general scheme and improvement of the landscape.

These decorations were quite frequently emulated in plaster paris, and a fair percentage of the Italian emigration was employed in the making and peddling of "Plaster of Paris," boys carrying baskets of fruit and other atrocious garden ornaments which were usually deposited in some prominent place in front of the residences.

As the artistic taste of the people became more and more developed, much money was spent in the beautifying of the land surrounding the residences, until to-day the grounds are one of the features of the property and are planned with the greatest care to obtain, with the natural beauties, the highest artistic attainment.

The architect and landscape artist soon saw the beautiful effects of columnar walks, lattice work and terraces with proper approaches, sun dials and pedestals for the support of interesting antique vases, fountains and ponds, interestingly arranged with respect to natural topography and foliage.

As concrete construction came into more general use, it was soon realized that in it was a material especially suited for the beautifying of gardens and lawns and the extensive grounds of estates.

The concrete while rough in texture is of a color which, though objectionable in a finished building in the centre of a city, lends itself admirably to a background of green foliage and bright flowers and is particularly adaptable to certain classes of informal buildings, such



FIG. 2—SHOWING CONCRETE USED AS A WALL WITH ARCHED OPENINGS.

as bungalows and club houses and in the construction of open porches and surrounding terrace walls.

In Figure 1 there is shown the use of concrete in the construction of a porch balustrade with urns for flowers and trailing vines. It will be noticed that the design is simple and yet strong and effective, and that the beauty of the vases is in their simplicity of form and good proportions.

In Fig. 2 there is shown the use of a concrete wall around a terrace of a boathouse. The arched openings in the concrete wall at the boat landing are particularly effective, and the entire ensemble has an element of beauty which would be difficult to obtain with other than monolithic concrete.

One of the principal uses of concrete as a decorative feature in landscape gardening is in the construction of pergolas, and for this purpose where there are a number of units of the same pattern, the work can be turned out at low cost and, properly designed, is very effective.

In Figs. 3, 4 and 5 are shown good examples of concrete posts of architectural proportions supporting the open trellis work which usually forms the roofs of features of this kind.



FIG. 3—PERGOLA ENTRANCE.

A very simple pergola entrance effect

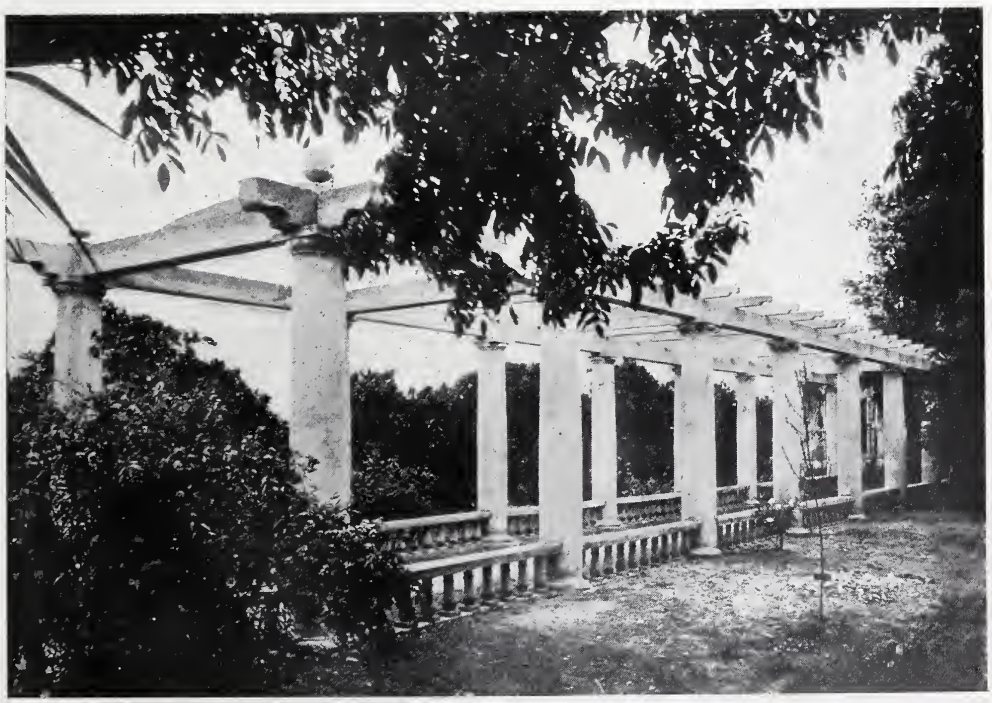


FIG. 4—DORIC COLUMNS OF MOULDED CONCRETE.

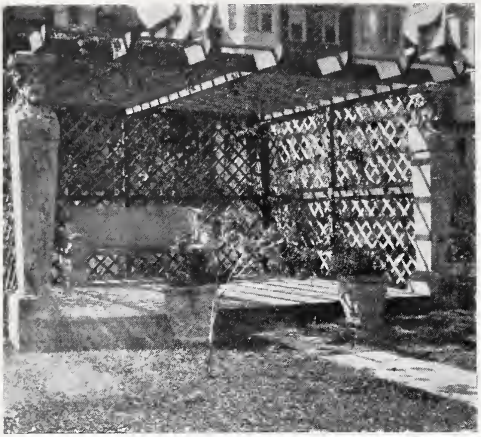


FIG. 6—CONCRETE PEDESTALS.

is shown in Fig. 3, where concrete is used for the simple posts, of massive proportions, of a garden entrance. The posts, as will be observed from the illustration, are given an entasis and are surrounded with timber work to form a trellis. Concrete has also been used in forming the lily pond, which makes an effective feature in the foreground.

A somewhat more elaborate design is illustrated in Fig. 4, which shows Doric columns of moulded concrete with a crude but effective balustrade consisting of moulded balusters with a wide coping. The work is crude, but, backed by the foliage and offset by the natural features, makes a very dignified and artistic structure. This larger pergola was built on the "Good Luck Ranch" in California.

Not only are the classic proportions adhered to in the design of columns for pergolas, but quite frequently the columns supporting the open roof follow Gothic or Norman lines, though probably with little consistency for such architectural features.

A departure from classic proportions and design in columns of concrete for a pergola is shown in the beautiful

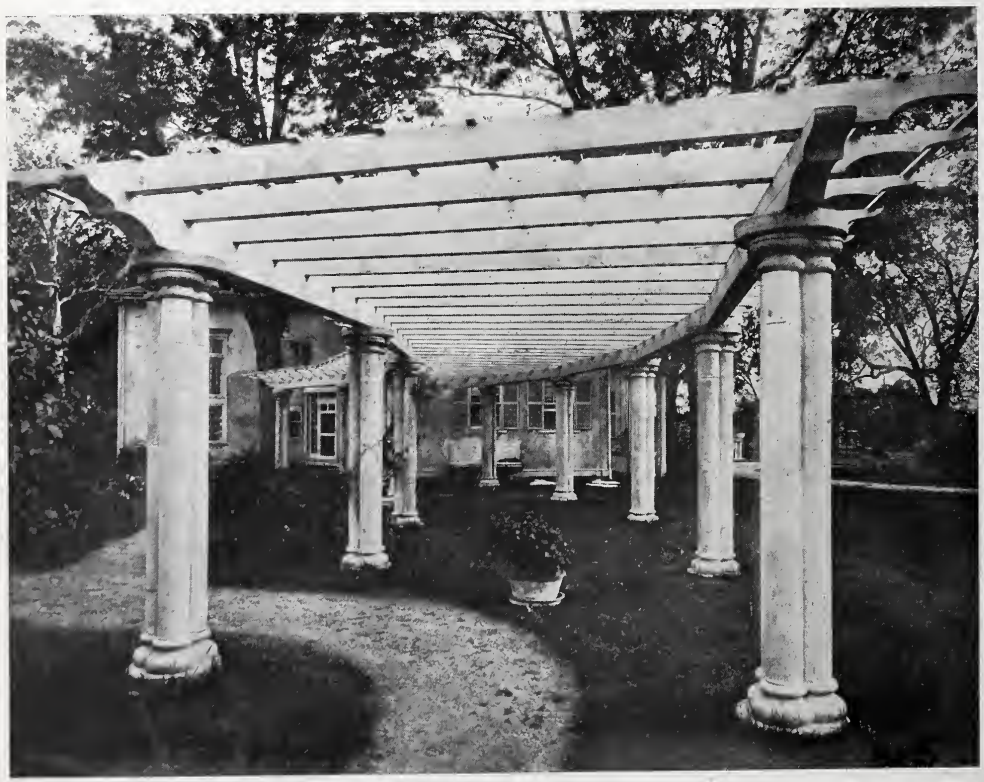


FIG. 5—GROUPED COLUMNS FOR THE PERGOLA.

effect obtained by the moulded concrete grouped columns illustrated in Fig. 5. The structure of which these columns are the principal feature is on the estate of C. Le Verne Butler, Framingham, Massachusetts. This pergola was designed by the owner and is very interesting and effective. No attempt is made to give a fine finish to the columns, but the texture of the concrete shows, which is rather an advantage in work of this character.

Not always is the designer's taste inclined towards columnar effects in the use of concrete for pergola construction, and a deviation from the usual column support is shown in Fig. 6, which illustrates concrete pedestals designed after the Pompeian style, with head terminations at the top, forming the main supports for an outdoor porch surrounded with lattice work, and effectively set off by the concrete flower pots and moulded concrete seat. This illustration shows beautifully the effect of sunlight and shadow obtained in a design of this kind.

Owing to the cheapness with which concrete can be used, as compared with architectural cut-stone work, in many sections of the country it has been extensively used for the construction of walls and entrances for enclosing the grounds of country residences.



FIG. 8—CONCRETE USED FOR ENTRANCE, ROUGH FINISH.

To show what dignity can be obtained by using concrete for these purposes, Fig. 7 is given, which illustrates a concrete gateway entrance of good proportion and design. A study of the photograph shows that the concrete is given a rough finish, excepting for a small border or arris on the edge. The design is particularly pleasing on account of its simplicity and proportions and, set off



FIG. 7—CONCRETE GATEWAY ENTRANCE.

as it is by the wrought-iron gates and the long flight of cement steps, makes a beautiful approach.

To illustrate how effectively concrete can be used for entrances to grounds without attempting to give it a smooth finish and leaving it in its own rugged simplicity, the illustration, Fig. 8, is given. These gate posts are at the entrance to Henry Mercer's place at Doylestown, Pennsylvania.

An examination of the photograph shows that no particular care was taken



FIG. 9—ENTRANCE TO A BROOKLINE, MASS., RESIDENCE.

by the green of the rugged foliage, and even in the construction of the form work, so that the irregularities, both in the moulding and in the texture of the concrete, are clearly shown. The beauty of the entrance exists alone in the rugged simplicity and good proportions and strength of the posts and the surmounting cap.

There is illustrated in Fig. 9 a beautiful entrance to a residence in Brookline, Massachusetts, which shows the capabilities of using concrete as a finished material. While the concrete gate posts are almost completely covered with a foliage, yet the photograph shows the possibilities of finishing the top of such posts and also demonstrates that the material can be used as effectively as cut-stone work for this purpose and with less cost. Concrete for such purposes also has this advantage, that when used in positions where it is to be partially covered with clinging vines it weathers rapidly, and the appearance of newness is dissipated in a few months' time. This, from an artistic standpoint, is very desirable where the effort is to obtain the picturesque and artistic rather than the newness of lately completed work.

The possibilities of concrete have been realized in the construction of work in tropical and semi-tropical countries, and for these climates it is certainly an ideal material, on account of the bright skies and beauty of the sunlight and the sharp shadows which exist under such conditions. The approach shown in Fig. 10 is an entrance-way on the Island of Ber-

muda and is a very good example of monolithic concrete used in conjunction with moulded concrete blocks for wall construction.

As with the other illustrations, this shows how results are obtained by designing massive posts of simple design and grouping, and capped with simple mouldings, the effect being obtained by the grouping and the proportions of the work.

A good entrance of more pretentious design, but lacking in the beauty of simplicity, is shown in Fig. 11. This illustration shows a gateway at Glenolden, Bermuda. The gate posts and wall are of monolithic construction, with some attempts at panelling, and illustrates what can be done with the material when care is exercised in the moulding and finishing.

A very attractive entrance, also constructed on the Island of Bermuda, is shown in Fig. 12. Here it will be noticed the wall and curb running into the posts are of more simple lines, being simply a straight wall with a V-shaped top and the posts have a simple cove moulding with fillet band and pendentive ornament with ball finial, being very effective and at the same time simple in construction and consistent with the material used.

Reinforced concrete is much used, both in gardens and terraces, and is extensively used in monolithic construction as walls, steps and balustrades, and is even cast in moulds in ornamental forms for seats, vases, pedestals and sun dials.



FIG. 10—MONOLITHIC CONCRETE ENTRANCE WAY ON THE ISLAND OF BERMUDA.

A very elaborate use of concrete in the garden is illustrated in Fig. 13, which shows a terrace surmounted with parapet walls and piers. The surface of the piers and walls is rough finished, of uniform texture, while the coping and caps are of smooth finish.

To the right of the figure is shown an open parapet with cast balustrades of ornamental design. The use of concrete benches and pedestals is also shown in this figure and illustrates how the more finished products in cement or concrete



FIG. 11—AN ENTRANCE GATEWAY—BERMUDA.



FIG. 12—AN ENTRANCE GATEWAY—BERMUDA.

act as an offset for the rougher and cruder work of more massive construction.

Two illustrations, showing the use of concrete in garden ornaments, as well, are illustrated in Figs. 14 and 15. In the former is illustrated the somewhat elaborate arrangement of benches and flower vases which can be reproduced at low cost on account of the fact that they are of one design and can be made in the same moulds.

Concrete has a great usefulness in its application to elaboration of gardens and lawns, for forming pedestals for the support of vases and urns. Quite frequently this modern material is used for the support of some ancient or interesting vase or water jar, as illustrated in Fig. 16. In such instances a concrete pedestal is generally kept as plain as possible and is probably more consistently used as shown in Fig. 17, which illustrates a concrete pedestal supporting a Coquina stone water filter.

A rather pretentious and interesting



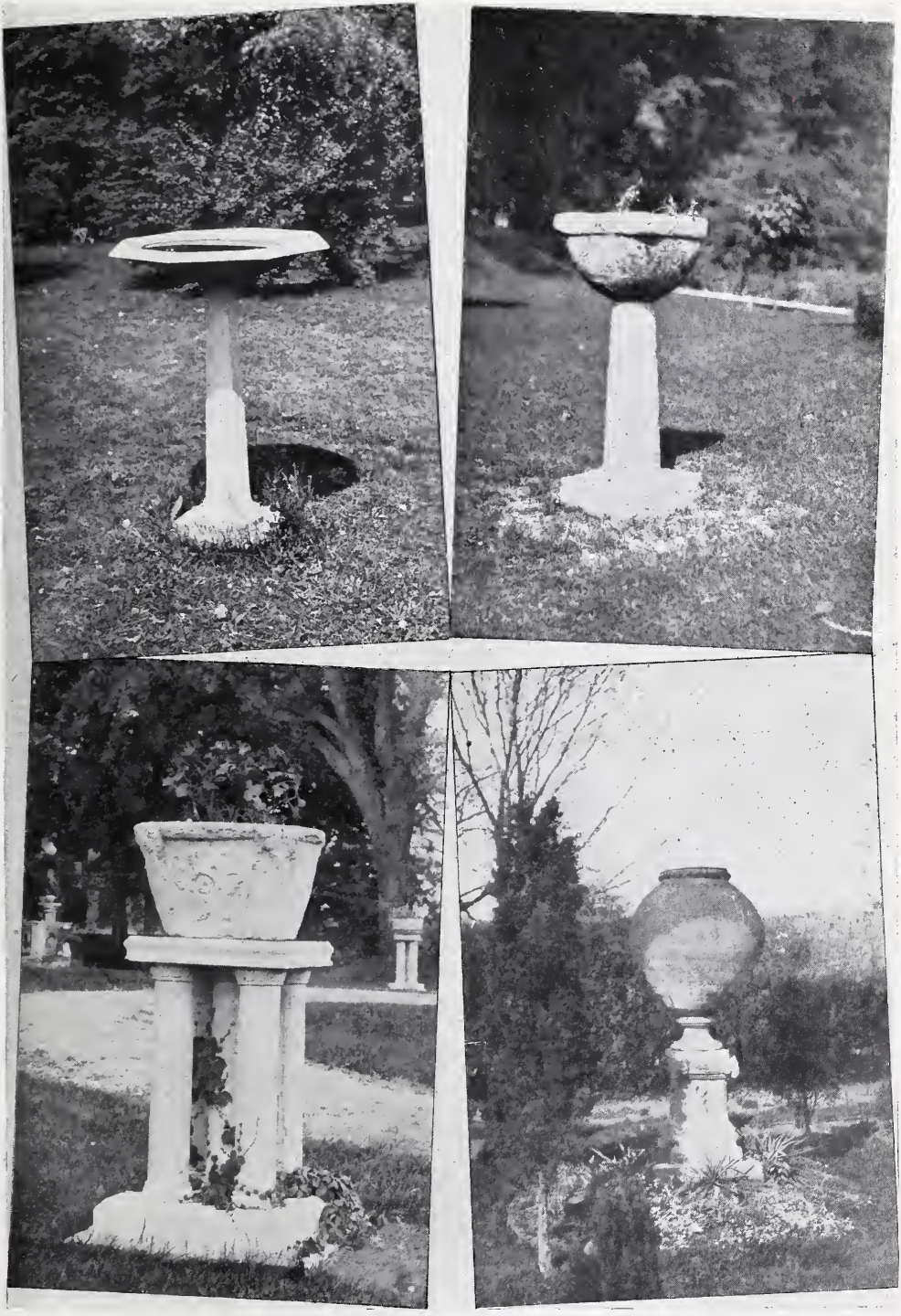
FIG. 13—ELABORATE USE OF CONCRETE IN THE GARDEN



FIG. 14—CONCRETE USED FOR GARDEN ORNAMENTS.



FIG. 15—CONCRETE USED FOR GARDEN ORNAMENTS.



FIGS. 16, 17, 18 AND 19—CONCRETE USED FOR GARDEN ORNAMENT.

piece of concrete garden ornament is shown in Fig. 18, which demonstrates that the roughness of the material only tends to the interest of the feature and allows it to be consistently used in conjunction with the vines and foliage, as shown in the illustration.

A beautiful piece of work in concrete, both as to proportions and finish, is shown in Fig. 19. This photograph illustrates a concrete drinking fountain for birds. The gracefulness of the design and the smoothness of the finish are interesting as an example of what can be done with concrete when care is exercised in the designing and in the manufacture of the article.

As an example of finely moulded work in concrete, of extremely elaborate design, it would be difficult to rival the assembly of features shown in Fig. 20. This photograph shows a circular seat, supported upon elaborate pedestals with claw feet, backed by a screen of panelled work in concrete, made interesting by pedestal pilasters at intervals, supporting the overhang of the coping, the entire design being further strengthened by a circular pedestal supporting the concrete vase finely moulded with decorative design.

One of the most elaborate decorations for a formal garden is illustrated in Fig. 21, which shows a temple erected on the grounds of a private estate in Massachusetts. This beautiful piece of work is made possible by the use of concrete and is one of the few examples of the clean and sharp mouldings which can be obtained in concrete only with the exercise of the greatest care.



FIG. 20—EXAMPLE OF FINELY MOULDED WORK IN CONCRETE.

[EDITOR'S NOTE—Mr. M. M. Sloan began his series of four articles on "The Architectural Treatment of Concrete Structures" in the May, 1911, issue of THE ARCHITECTURAL RECORD. The second installment was published in August, 1911, and the third in November, 1911. The author has treated his subject under the Chapter Headings: I—Requirements for True Architectural Treatment; II—Surface Treatment; III—Decorative Treatment and Ornamental Design.]



FIG. 21—ELABORATE DECORATION FOR A FORMAL GARDEN.



COLUMN OF ANTONINUS PIUS
IN THE VATICAN GARDEN.

FAMOVS ROMAN COVRTYARDS

WORK OF THE GREAT ARCHITECTS OF THE RENAISSANCE

BY M.D.WALSH

THE GREAT ARCHITECTS of the Renaissance, who have left their indelible mark for all time on the history of architecture, surpassed themselves in their courtyard work in Rome, creating examples of purest Renaissance architecture designed in finest lines on Greek models, unspoilt by the decadence of later style, with its overflow of decoration. One of these, that "Prince of Renaissance architects," Bramante, not content with "writing his name in the heavens" in the matchless architecture of St. Peter's Dome, has left behind him, beside palace, dome and temple, many a stately courtyard, whose symmetry and grace would not discredit Athens at its best.

Some of these magnificent architectural works stand out prominently in the eyes of the world, where all can see and appreciate them, such as the *"Cortile di Belvedere"* and the *"Cortile di San Damaso."* Many more, however, not Bramante's alone, but works of his able pupils and successors, lie almost hidden within the gateways of historic palaces in the heart of old Rome, or in silent churches in narrow byways or green hillsides overlooking the city, where the lover of pure architecture seeks them out as he would a precious treasure, longing to carry the quietly-studied perfection of their simplicity into some of the florid architecture of the present day.

It is a pilgrimage dear to all lovers of Renaissance work, for no achievement, even the smallest, of the mighty idealist who, had he lived to complete it, would have made St. Peter's the marvel of architecture for all time, can be neglected by those who would seriously study his designs.

The *"Cortile di San Damaso"* and the *"Cortile di Belvedere"* are the best known specimens of Bramante's architecture—each in the Vatican, each alike forming backgrounds to the world's masterpieces of sculpture and painting; so that, side by side with the Greek sculptures and the "fine flower" of Renaissance art, embodied by Raffaelle in its highest degree, the name of one of the grandest, most vigorous and most ideal of Renaissance architects will go down to posterity.

The *"Cortile di San Damaso"* forms, so to speak, the "Roadway of Nations" on their way to audiences at the Vatican or in visiting many parts of the papal palace! On emerging from the staircase, the splendid courtyard bursts upon the eye almost as a surprise, strikingly impressive in the vastness of its cyclopean spaces, unspoilt by any extraneous object or ornamentation. These famous "Loggie" of Bramante once stood open, but for the preservation of the peerless frescoes of "Raffaelle" and "Giovanni da Udine" they were finally enclosed with glass.

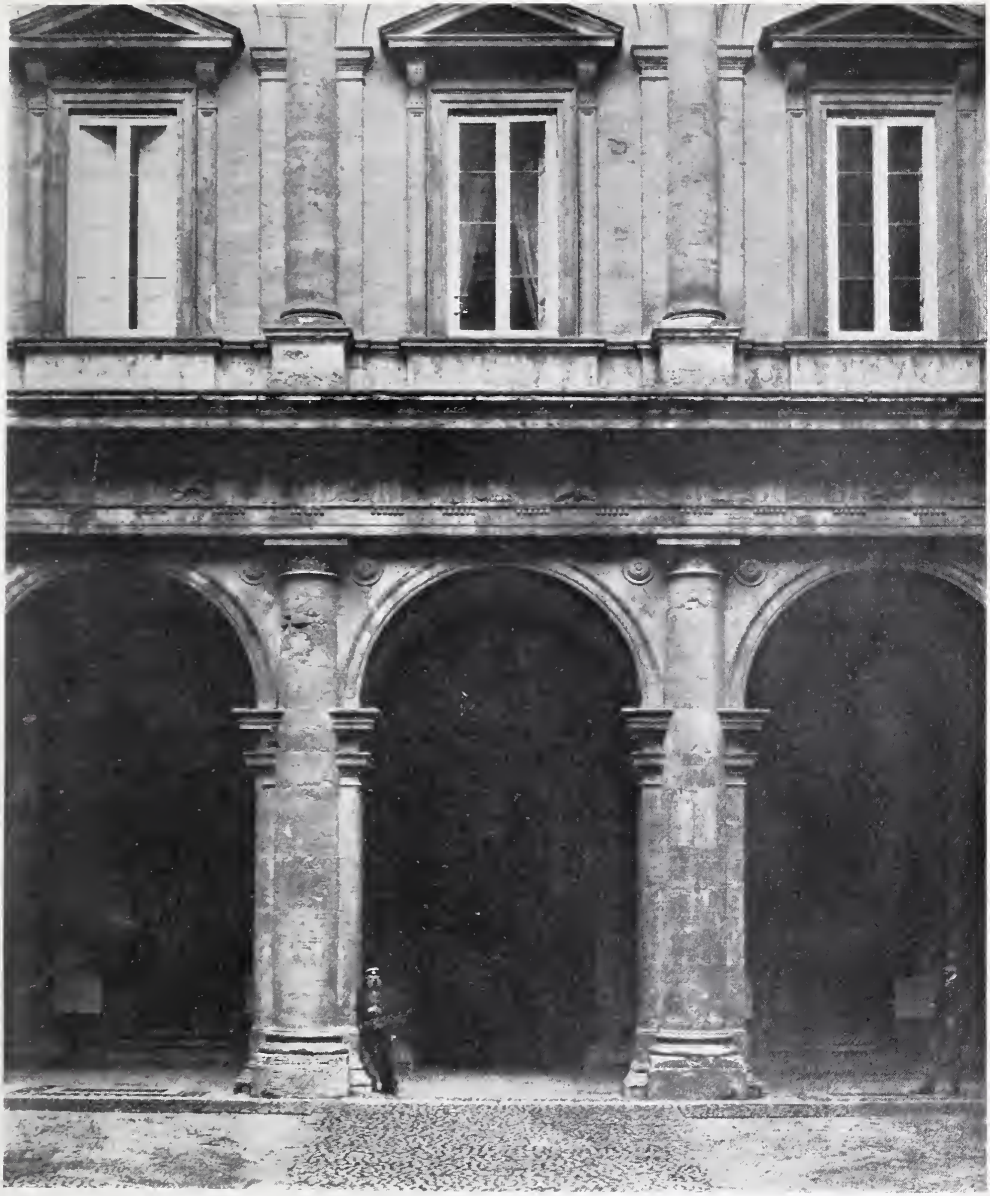
Every detail of the architectural scheme makes for the central idea of vastness; the three tiers of slender flat columns, crowned by Doric, Ionic and Corinthian capitals, the perfect finish in both proportion and execution, enhanced by an almost Spartan simplicity of form, *all* tend to create a greater effect of space. Even those unappreciative of its architectural value come under the spell of the complete restfulness and harmony conveyed by the *"Cortile di San Damaso"* and its sunlit spaces, where the papal "gendarmes" in picturesque uniform, passing up and down

on sentry duty, look singularly insignificant and unimpressive. Fine as is its effect by day, the massive courtyard grows almost gigantic, seen at twilight or by night, when the spaces seem to recede into infinite vastness—the graceful curve of arch, the moulding of column appearing accentuated into a veritable vision of architectural symmetry, a nobly-dignified epitome of restrained power!

Widely different in both conception and design is Bramante's smaller masterpiece within the walls of the Vatican, the octagonal *"Cortile di Belvedere."* Simple in its lines, as are all his works, the graceful octagonal temple is wrought with a tender and loving care, fitting it for the gods of Greece which it worthily enshrines. Bound by the restrictions of space (for the court is small compared with the other massive courtyards in the Vatican Palace), Bramante knew how to make his tiny "Belvedere" a little gem of architecture, perfect in every point, from its columns with Doric and Ionic capitals, its ornamentation of "sarcophagi" and bas-reliefs, and the "Molossian hounds" guarding its entrances, to the fountain in the centre sending up jets of spray into the clear air against a sky deeper, bluer, by contrast, with the marble columns and friezes! It is like a bit of life-loving Greece, exiled amid the more sombre surroundings of the papal palace, showing the talent of the many-sided architect who could be stern to rigidity in some of his conceptions yet burst untrammelled into this joyous thing of brightness! How many of those who visit the "Laocoon," the "Apollo Belvedere," the "Antinous" and the "Perseus" realize how greatly their appreciation of these world-marvels is enhanced by their unique setting; how the gods one approaches by the *"Cortile di Belvedere"* seem more godlike, as passing from one to another of their niched recesses one pauses (overwhelmed, unconsciously perhaps, by their sovereign artistic beauty) to look out on the exquisite open-air court with its dome of sunlit sky and hear the soft purling of the fountain, where flags and lilies bloom under the water cascade.

Yet another specimen of Bramante's versatile genius is the palace courtyard, known as the *"Cortile della Pigna"* of the Vatican. Here again the restrained dignity of the architect, who scorned any effect made by a gorgeous wealth of decoration, shows itself prominently in this vast "Cortile" with its perspective of filled-in arches, divided by double sets of columns, crowned by Corinthian capitals. The second order of columns is identical with the first, while the lower end of the court forms a fine ellipse, surmounted by an open gallery.

In Rome, however, even a Renaissance courtyard, no matter how conformable in architecture to the pure forms of Greece, cannot escape from the influence of the strange "personality" (if one may so express it) of the mighty Empire which lies iron-handed about every Roman structure, no matter what its date. Here, in the midst of Bramante's classic "Cortile" rises the pedestal of the column of "Antoninus Pius" and at the end, in the recessed niche of the ellipse, raised on a balustrade and steps, stands the curiously-striking "Pigna" or "Pine-cone" (from which the courtyard takes its name), flanked by the two bronze peacocks of splendid workmanship, which surmounted the Emperor Hadrian's Tomb on the "Castel' Sant' Angelo." The colossal cone which once flaunted like a flaming beacon against the brightness of a Roman sky, crowning the Imperial Mausoleum by the river, seems like some captive giant here imprisoned within walls! Yet, strangely enough, there is a triumphant air about this group of antique sculpture. The great bronze "Pigna" glints golden still in the afternoon sunshine of the quiet garden court, while the bronze peacocks, with outspread feathers, guard it proudly yet as they guarded the Emperor's tomb. They were placed here with the consummate skill for value possessed only by a genius, for, instead of detracting from the architectural scheme, they marvellously enhance its effect of solidity and power, as any lighter ornament or decoration, even of supreme sculptural excellence, would have changed the aspect of its massive



CORTILO DI PALAZZO FARNESE.
ROME, ITALY.



CORTILE OF SANTA MARIA DELLA PACE,
ROME, ITALY.



CORTILE OF CANCELLERIA PALACE, ROME, ITALY.

proportions. A Venus, a Dancing Satyr, or a Greek vase, for instance, could not but strike a discordant note in this "Giardino della Pigna," just as Hadrian's colossal emblems of immortality would jar the eye, seen in the octagonal "Cortile di Belvedere." Far different a setting to the majestic Vatican enshrines another of Bramante's famous courtyards—a tiny treasure which hides among the devious and narrow thoroughfares of the "vanishing Rome," whose picturesqueness is slowly but surely fading under the hand of the ruthless "modernizer." As if jealous to guard her art treasures from the carelessly unseeing eye of the intruder, the church of "Santa Maria della Pace" (Our Lady of Peace), with its curiously curved and columned portal, stands in a narrow byway behind a network of winding streets. Here, as in the "Cortile di San Damaso" in the Vatican, two great lights of the Renaissance meet again, but in this case Bramante's work does not form a setting for Raffaelle's dreams of splendid color.

The small shrine which holds a wealth of art and sculptural beauty is not the goal of our architectural pilgrimage today, nor even the quiet chapel where Raffaelle's "Sybils" make a perpetual glory, as of sunshine, in the dark and sombre church. Beyond the church, within the monastery precincts, Bramante built his exquisite little courtyard or cloister. True to his traditions of sublime simplicity, "Summa ars est celare artem," the "Master-builder of palaces" stooped to lavish patient skill and ideal excellence on this smallest child of his fancy, till it stands out like a little Greek temple, clear-cut, classic, bordering on the severe, perhaps, critics might judge it, for its size, yet with a grace which owes nothing to decoration, everything to line. The arches of the cloister spring from flat columns, upon which are superimposed graceful columns with Doric base and Ionic capitals. These, in turn, support an open gallery whose columns are flat and rounded alternately. The original design is the essence of graceful proportion—the slender pillars of the rounded columns above the arches posed upon their Doric base with surprising lightness and splendidly alternating with the flat columns, crowned by Corinthian capitals.

This courtyard of "Santa Maria della Pace" was a work of Bramante's later years, when his spurs had been won in many a field, but it shows no sign of a falling off in power, for his genius, not content with reproduction, even of original forms, continued to create to the end.

Only a short distance from "Santa Maria della Pace" stands a better known monument of the architect's sovereign skill, the *"Palazzo della Cancelleria"* or "Chancellor's Palace." It is perhaps the most splendid palace Bramante ever built, with a noblest courtyard, second to none of his masterpieces.

As in the Vatican courtyards no space restrictions hampered the architectural scheme. His marked predilection for the purely classic, the majestic, was given full play and to his hand came antique columns fit to support the massive structure which not even a Roman Emperor could have scorned as unworthy an imperial residence. The "Theatre of Pompey" stood not far from the site of the present "Cancelleria Palace," and its magnificent granite columns were used in the adjoining church dedicated to St. Lawrence. Many centuries later, when Cardinal Riario rebuilt the church, entrusting the designs for both church and the adjoining palace to Bramante, the architect transferred the columns from the church to the palace courtyard —a royal beginning for a structure which was to rank among the veritable triumphs of Renaissance architecture. The effect of this courtyard is truly imposing—lighter in design than the "Cortile di San Damaso," perhaps, but intensely noble in form and proportions. Two tiers of magnificent arches spring from rounded columns with Doric capitals, while the third order, closed, shows a series of massive flat columns, crowned with Corinthian capitals.

The capitals of the columns from Pompey's Theatre have been added by Bramante, their chastely severe and simple ornamentations, consisting of

separate designs of roses, coils and acanthus leaves, blending marvellously into the monumental severity of the ponderous antique columns, while yet adding a touch of grace to the rigidly classic design. Circular medallions, each with a rose in its centre, are carved in bas-relief above every column in the two lower stories. Strange as it may seem, taken in conjunction with granite antique columns, supporting a structure of travertine, taken from the huge blocks of the Colosseum, the rose decoration seems to fit in with the general harmoniousness of the architectural scheme! Nevertheless, one is tempted to marvel how Bramante placed them there—the architect who absolutely worshipped the classic grace of line almost to the exclusion of all ornament, whose virility scorned decoration as effeminate. Even in the days of the Renaissance, however, the great painters and architects were forced to make concessions to the wishes of powerful employers. It would appear that in the coat-of-arms of Cardinal Riario a *rose* appears in the armorial bearings; hence, travertine and granite must needs bloom, into *unwilling* roses, perhaps, under the hands of the classicist architect, so that the escutcheon of the "Cardinal of the Roses" might go down to posterity indelibly engraved on the walls of his mighty palace.

Another great specimen of Bramante's courtyard work in Rome, of peculiar interest to us, is left in the "Cortile" of the "English Palace," or rather, the *"Palazzo Giraud Torlonia"*—that massive old structure out in the former "Burgus Saxonum" near St. Peter's, which, with its great blocks of travertine, seems more fortress than palace. It was presented to the sovereigns of England in the sixteenth century as a residence for the English ambassadors, and Cardinal Campeggi, the papal legate to Henry VIII. resided in it for some time.

The characteristic note of Bramante's architecture—solid strength and pure outline—is markedly apparent in the courtyard of the "English Palace," with its fine, unimpaired vista of Doric columns, its splendid proportions. It contains many interesting architectural details, but time forbids one to linger unduly in a pilgrimage to Rome's many classic courtyards. Ample leisure is needed to see and admire them all. For instance, there is Baldassare Peruzzi's exquisite little flowery courtyard in the *"Palazzo Attemps"* or his sombrely beautiful "Cortile" of the dark *"Palazzo Massimo alle Colonne,"* both equally deserving of careful study, as grand examples of pure Renaissance. Peruzzi's graceful genius loved to create a palace, classic yet fairy-like in beauty of ornament. He revelled in grace and lightness. Indeed, one tends, in a certain sense, to compare his genius, his intense love of the gracious and the beautiful, to that of Raffaelle, as instinctively one likens the genius of Bramante to Michelangelo. To these two great Florentines the sombre side of life predominated. Even in their art, their imagination ever sought the perfection of form and symmetry, unadorned almost to bluntness by the minor adjuncts of decoration. Now Raffaelle and Peruzzi sacrificed no line of perfection for the decorative. They, too, were steeped in the cult of classic symmetry and peerless proportion; but their natures were cast in a less rugged mould, and their personality overflowed into their work, softening the outlines with their own love of life and beauty and youth.

We cannot pass by without a glimpse into the grand "Cortile" of the *"Palazzo Farnese,"* where Sangallo raised his superb colonnade, a fitting entrance to one of the greatest, if not *the* greatest, of Roman palaces, which, apart from the treasures of art it once contained, is a triumph of Renaissance architecture—gorgeous and imposing even for that halcyon age—built *by* princes *for* princes, for Michelangelo himself took up Sangallo's work on his death, leaving it with the hall-mark of the personality which made everything he touched (not even of his own beginning) so utterly *his own*—not so *perfect,* perhaps, as the ideal of its creator, yet *more* original.

Another regal courtyard is that of the *"Palazzo Borghese,"* an example of

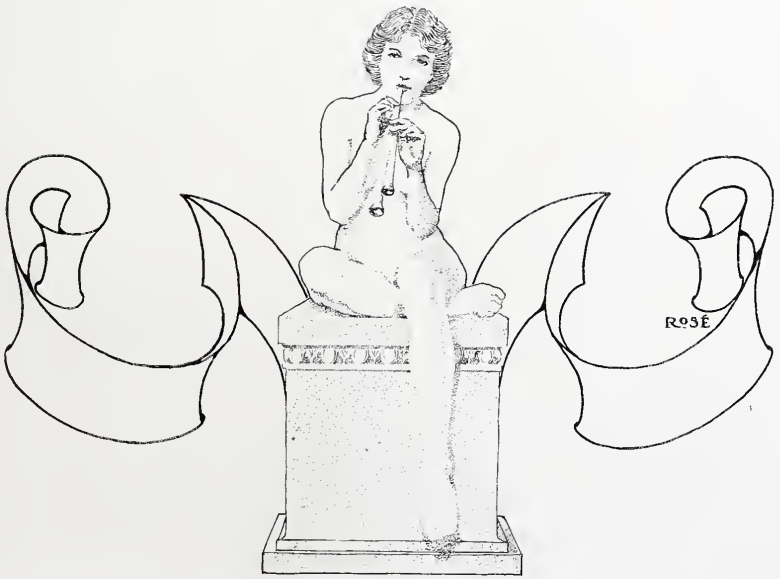


DETAIL OR ORNAMENTATION—COLUMN OF "THEATRE OF POMPEY" IN CORTILE DEL CANCELLERIA PALACE, ROME, ITALY.

later Renaissance architecture widely differing in effect to Bramante's vast spaces and splendid perspectives. While the architectural scheme, the work of Lunghi and Flaminio Ponzio, is grandiose to a degree, with two noble tiers of arches springing from massive groups of columns, the almost colossal statues and sculptural fragments seem to unduly crowd the spaces between the arches. Contemplating the effect of the court as a whole, it appears, in a way, though its proportions are undeniably fine, as if such colossal arches, statues and columns needed a greater vastness of perspective to give them their full architectural value. The power and intensity of the purer Renaissance had already been touched with the shadow of decadence which was to sap its force in ceding to that feeling for the ornate, the over-abundance of even fine and massive work, which took away from the grand simplicity of the first great masters.

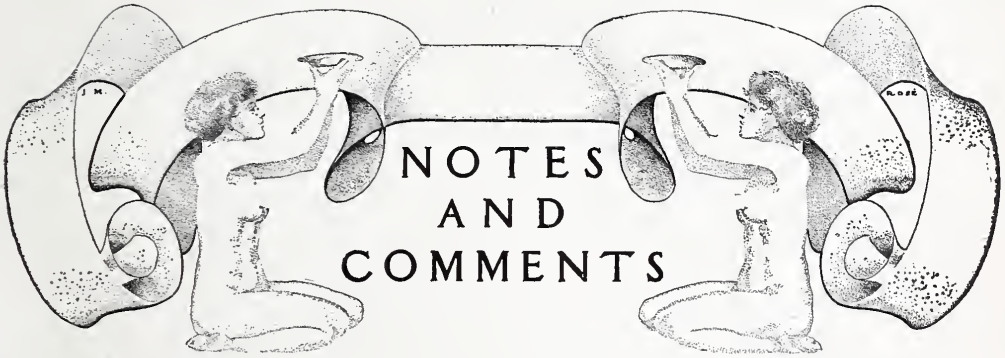
Nevertheless, many a splendid courtyard, even of the latter Renaissance, is well worth attention in the palaces of Rome. One who loves the study of architecture can find matter for endless interest in the Roman courtyards, for, beside these few examples—mostly of the finest epoch of the Renaissance—there are countless more, some mediæval, some of later date, but few that do not possess either striking beauty of outline or peculiar suitability of decoration.

Above all, the courtyards of Rome have a curious attraction altogether their own, not only from their architecture or associations, not even from the twin interests of the classic and historic from the mingling, perhaps, of all these causes: the Roman atmosphere which surrounds them (to which sky and light give a greater value), the purely classic beauty, the romance of history, and the names of the masters whose personality still lives in their great creations, intensely charged with vitality.





ENTRANCE DETAIL—"JOURNEY'S END."
House of Mr. Hayden, Lexington, Mass.



TWO INTERESTING PROJECTS.

Two city improvement projects, costly, daring, but with unusual practical merit to commend them, have been brought forward in the last few weeks by architects. One of them is the scheme of Henry Rutgers Marshall for a new avenue to afford more direct connection between the Grand Central and the Pennsylvania stations in New York. By starting it at Fifth Avenue and Fortieth Street, giving to it a long, slight and handsome curve, and bringing it into Seventh Avenue just below Thirty-fourth Street, he succeeds in avoiding any buildings of prohibitive value. The avenue traverses a region which has thus far been little developed, only two modern structures, indeed, standing in its way. One of these is the Knox building at Fifth Avenue and Fortieth Street, where it starts, and the other a nine-story building, only forty feet wide, near the corner of Thirty-seventh Street and Sixth Avenue. Of the other structures that would have to be acquired, hardly any are more than four stories in height. On the other hand, the avenue would certainly develop, as Mr. Marshall points out, a large amount of property that now yields little in taxes to the city. As one studies its location, it becomes evident that it would almost surely become a great shopping street. Of the artistic features, Mr. Marshall says: "From Fifth Avenue the vista down the new curved avenue would not be unlike that of Piccadilly in London; and sites upon it would certainly be sought by wealthy merchants who could afford to house themselves amidst fine architectural surroundings. The juncture of the new avenue and Broadway might be made a center of interest, and on the whole of the street southwest of that point a splendid view of the new Pennsylvania Railroad station would be gained." The opportunity to get that is certainly one of the great architectural needs of the city to-day. Incidents of the plan are the creation of a plaza in front of the new Library and the widening of Fortieth Street from Fifth Avenue to Park. Without doing the latter, the cost of the land and buildings to be acquired has been officially estimated at about fourteen millions; but it is undeniable that the avenue would be of extraordinary convenience and that it would create large values. The other project to which reference was made has been brought forward by J. R. White, of Niagara Falls. It contemplates the building of a new Union Station at Third and Falls Streets; the erection of a city and convention hall on the site of the New York Central's present station; the elimination of a number of exceptionally dangerous and annoying grade crossings and the construction of a scenic boulevard along the riverbank, connecting the north and south ends of the greater city, formerly the villages of Niagara Falls and Suspension Bridge. The trains would back into the new station and would journey from one end of the city to the other by the right-of-way acquired some years since for a railroad that was never built. It is interesting to reflect that one can hardly think of two city improvement projects in America that would be seen and appreciated by a greater number of different people than would these.

CONTRASTED REPORTS.

In "The Future Extension of the Suburbs of Sheffield," a large quarto, illustrated with maps and with diagrams showing cross section street developments, there is offered a good example of the attitude which is taken toward town planning by the architectural profession in England. For this carefully developed project, which contains not so much as a hint of architectural bias or origin, is in reality the reprint of a lecture delivered before the Sheffield Society of Architects and Surveyors by Edward M. Gibbs, F. R. I. B. A. Published in a form similar to that in which several American city plan reports have been issued, it offers, also, an interesting basis of comparison between the work in the two countries. For instance, the plans for Sheffield and those for Rochester, Los Angeles and Grand Rapids are issued in quartos which on the outside look almost exactly alike, the advantage in neatness, paper, and general attractiveness being, however, with the more expensive American reports. Within, the latter are full of pictures, many of them photographs, but many also drawings, wonderfully cleverly done, showing—perspectively and prospectively—architectural compositions of great attractiveness. There are shown, too, maps and diagrams that are of great interest and merit, as examples of draughtsmanship at least; and though of the five different men concerned in the preparation of these American reports only two were architects, the emphasis is overwhelmingly on the creation of the architectural city beautiful. In the English report, written entirely by an architect, there are tables showing population and area growth; there are but five photographs, and these are of streets; the cross section diagrams might all have been made in the office of a city engineer; and of the five large folded maps, four are topographical, and crudely and unattractively done, and presented in black and white. The fifth is a simple line drawing suggesting a plan of model convenience for a city situated on a plain. Neither in illustrations or text is there suggestion of architectural composition. The country around Sheffield is exceedingly ruged, and the whole discussion has to do with contours, with engineering details, and with housing. Park reservations are referred to, but briefly. The report considers much more fundamental matters than do the American reports. There is nothing about it which is spectacular, or even popularly attractive. It deals only with the planning of streets and the subdivision of property—matters which in America we have need of taking up a great deal more than we do. In part, the difference results, no doubt, from the fact that the Sheffield report deals with the outskirts of the city, and not at all with the built up portions. Yet there remains the remarkable contrast, which is the more striking when it is realized that the Sheffield report, which does not touch upon architecture, was wholly written by an architect, and primarily for architects; while the American reports, a majority of whose writers were not architects, place their emphasis so strongly on architectural development, even to the slighting of some fundamental considerations. Town planning in England and city planning in America—a difference in term for the same thing which is of itself significant—are still greatly unlike. Each has something to learn from the other; and both will be better as they grow to be more alike.

AN OBJECT LESSON.

When Mayor Magee of Pittsburgh recently signed the ordinance authorizing the removal of the Hump—that hill which has long confined the business section of Pittsburgh—a news note stated that plans were immediately announced for skyscrapers of a total value of $100,000,000 to be erected on the partially leveled ground. One was to be a monster hotel; another, a twenty-story office building, and so the list went on. It offered a curious commentary on American ideas of urban expansion. No one seemed to think of business suddenly spreading out, to flow in thin stream over a large space. The idea was inch by inch progression, the ground put to just as intensive use as if insurmountable barriers still hemmed it in. What, after all, did the business section actually gain? Might it not, from a congestion standpoint—congestion of traffic, with all the expense and loss which that involves, as well as congestion of human beings—have been a little better for Pittsburgh if, the Hump remaining, a secondary business center had been developed? For, of course, though all hills were leveled, there still would be the barriers of time and distance to crowd business toward the center, to restrain its rapid outward movement, to force intensive use of land, unless some legislative restriction on

the height of buildings should give artificial stimulus to its movement. The idea of expansion illustrated is American because American city ordinances so rarely provide that stimulus. A striking object lesson is offered by the event.

CITY PLANNING IN LIVERPOOL.

City planning improvements in Liverpool are usually associated with the water-front developments and with housing improvements, but Liverpool has not been overlooking the spectacular and grandiose effects of modern city planning. A thoroughfare that varies in width from eighty-four to one hundred and eight feet has been constructed around the city in a rough semi-circle, so as to enclose the city on all but the river side. Now practically completed, it is about seven miles in length, and is situated from three to four miles from the center of the city. Intersecting at various points are radial roads leading out to other towns or outlying sections. Some of these are as much as one hundred and fourteen feet in width. Car tracks are laid on many of them, and many of them are beautified with wide grass margins and plantations of shrubbery. These broad streets have been secured by requiring the landowners to give without cost street width to the amount of sixty feet, this being the by-law requirement. Then the city purchases the strips required for the additional width.

WANTED, A DA VINCI.

"If Da Vinci Came to Town" is the suggestive title of a sketchy note which Ernest Thompson Seton has contributed to The American City. It begins with a protest against classicism, on the ground that if Leonardo "had to design a bridge, a cathedral, or a spoon," he would not have gone "to the library to try to find out how the ancient Greeks did it. . . . It is very sure Da Vinci would have accepted modern life in modern shape, but would have helped by the touch of his genius." The second point of the article is thus expressed: "Of all the ugliness of our modern towns the least justifiable is the ugliness of their color. There is no reason, economic, climatic, or geographic, why New York should not be as beautiful in color as Venice. . . . Of all the defects, that of color is the easiest to remove, and of all it is the last thought of, no doubt partly because the ancient Greek color is lost, and partly because of the low standards of taste that prevailed in the century just closed. . . . There are few safer, better colors than good brick, and yet even this must be hidden in a coat of most atrocious red paint. There are plenty of good colored slates, yet the only unpleasant one, the leaden gray, is the accepted style." He claims that not a single building in New York has lost its color through soot or dirt, though often colors have been subdued or veiled, and sometimes improved, by the "bloom of time." He believes that ultimately public good taste would be a guarantee against vulgarity in color, and that meanwhile a sufficient safeguard would be construction with colored materials. He thinks the "great companies" would be willing to pay for beauty. "They might put decorative telegraph poles on their roads for the same reasons that they put onyx pillars in their stations."

PALACE AND GARDEN.

While New York—where city life has been always a moving picture—has been resigning itself to the passing of the Madison Square Garden, London has been agitated by the threatened loss of the Crystal Palace. But the Palace, which was opened to the public nearly sixty years ago, and has been visited by not less than 100,000,000 people if the weary turnstiles may be trusted, is a good deal older institution than Madison Square Garden and has a stronger hold on the popular heart. So the threatened loss was regarded as something like a public tragedy; and when the auctioneers announced that the sale would take place on November 29 and issued a catalogue of the immense building and its contents, the Lord Mayor convened a meeting at the Mansion House itself of "all bodies and persons interested in the acquisition of the Palace and its grounds for the use of the public forever." It was stated that five million dollars would save the building, and several thousand pounds were pretty promptly subscribed. But the sum was a big one to raise in a month's time, with no very definite plan agreed upon for the future of the institution and indecision as to whether or not the building could be suitably regarded as a public memorial to the late King Edward. With a sigh of relief, therefore, England read one November morning that the Earl of Plymouth had purchased the Crystal Pal-

ace and would hold it until the national fund should be able to take it off his hands. By such occasional acts as this the privileged class almost justifies its existence, though one may wonder whether some of our own rich men might not have risen to the like opportunity, had there been a correspondingly popular expression of the wish—undoubtedly widespread — to save Madison Square Garden. Picturesqueness and beauty are all in favor of the Garden, as also is convenience of location, while educational value and ministration to popular social and moral needs—in which the Palace has had the advantage—were mere incidentals that could be easily provided under another management. It is interesting to note, too, that the Palace, for all its popularity, has not been a financial success for more than forty years. But in one respect, its location has given to the Palace a great advantage over the Garden. For while the "Garden" is really only a building, the "Palace" plant includes a park of 200 acres, adorned with great fountains and opportunities for out-of-door sport of various kinds. History says that when the central building was constructed there was the opposition and criticism that great projects nearly always evoke. It was said that the first strong gale would blow it down; that the heat of the sun, focused through the countless glass panes, would grill to death all who stayed inside; and that, failing that untoward circumstance, the plague was sure to ensue from the confluence of such vast multitudes as such a building would harbor.

TOWN PLANNING IN FRANCE.

The cities in this country which have made such a stir about getting "city plans" and adopting a program of improvement to last over a term of years, in order that each may be "the Paris of America," will do well to study the new improvement project to which Paris has now, with no great fuss, committed herself. This contemplates the expenditure of $180,000,000 on municipal improvements, the expenditures to be spread over a period of fifteen to eighteen years, and to be met by the issue of municipal loan stock. School additions and improvements are to take one-tenth of the sum; hospitals, $7,000,000; new construction connected with the water supply, $25,000,000; street work, $9,000,000; the fight against tuberculosis, $6,000,000; public buildings, $5,000,000; and squares and gardens, $3,000,000, while the great sum of $86,000,000 is set aside for what we call city-planning work, to be used in the creation or extension of traffic arteries, etc. With all the talk about the town-planning act of Great Britain, the fact has been almost overlooked that France has its counterpart in the passage of the Beauquier town extension bill. This bill provides that within five years from the date of its passage each urban district containing ten thousand or more inhabitants shall prepare a plan for its improvement and extension. This shall "determine the position of public squares, gardens, parks and open spaces; shall fix the width of roads, their direction, the manner of constructing the houses, and, in general, shall establish the proper development of the town on hygienic and artistic lines." The plan must be approved by the department Bureau of Hygiene and by the commission for the preservation of sites and places of natural beauty or historic interest. The plan must also be subject for a year to public criticism and objection before the Council of State shall authorize its adoption. Once adopted, it is to remain in operation for 30 years, when it is to be renewed, and during all this period extensions and improvements must be made in accordance with it.

COMPETITION FOR AUSTRALIA'S CAPITOL.

Copies have been received in this country of the official invitation to participate in the competition for the planning of the new capital city of Australia. The invitation, which comes from the Minister for Home Affairs for the Commonwealth of Australia, at Melbourne, states that there will be three prizes. The first carries a premium of $8,750; the second a premium of $3,750, and the third a premium of $2,500. To assist the competitors in the preparation of their plans information is given under the headings: "Historical and Introductory," "Requirements," "Description." Further information may also be obtained by addressing the proper authorities. The data given includes not only historical notes, but statistics relating to meteorology and climatology, complete contour maps of the section of country immediately concerned, and topographical maps of nine hundred square miles of federal territory, maps showing rainfall, temperature statistics, reproductions of landscape sketches, etc. The structures for which sites must be provided include the Parliament House, the residences of the governor general and prime minister, public

offices for each of the various departments of government, courts of justice, places of public worship, a national art gallery and library, university, technical college, city hall, general post office, museum, railway station and freight yards, military barracks, hospitals, national theatre, central power station, gas works, markets, stadium, parks, public gardens, etc. The competition is international in every sense. It is promised that the prizes will be awarded within two months from the date of the receipt of the designs. All designs submitted are to be exhibited in Melbourne for a reasonable period. Thereafter the competitors may, if they desire, arrange on their own behalf a second exhibition to be held in London or elsewhere.

PROCEEDINGS OF CITY PLANNING CONFERENCE.

The Proceedings of the Third National Conference on City Planning, which was held in Philadelphia last May, have now been issued in a dignified volume, uniform in style with those of the Second Conference. The papers are given in full; but the discussions, both prepared and extemporaneous, have wisely been shortened to the extent of eliminating repetitions. The list of subjects considered in the numerous papers, if somewhat formidable in extent, is replete with interest. Their authors include not only most of the men who are prominent in this country in the city planning movement, but also three Englishmen: Raymond Unwin, Thomas H. Mawson and Thomas Adams. The book, which may be purchased from the Secretary of the National Conference, Flavel Shurtleff, 19 Congress Street, Boston, while necessarily lacking homogeneity—as all convention proceedings do—is yet a valuable addition to the slowly growing literature of a very broad and very interesting subject.

ARCHITECT AND ENGINEER.

Among the numerous books on building construction we have yet to find one which presents the subject in a way entirely intelligible and helpful to the architect. Our books on construction are invariably of that class termed practical, assuming a thorough knowledge of elementary mathematics and some understanding of the principles of statical mechanics, physics and the constitution of building materials—which is, of course, too broad an assumption, as the architects themselves will doubtless admit. For those who have been able to keep up their schooling in engineering, such books answer, in a way, the needs of every-day practice. The profession at large, however, remains, to a considerable extent, ignorant of and uninterested in the art of engineering as it concerns the constitution of buildings. On the whole, the art of engineering remains for the American architect merely an intricate process of competition, which must occasionally be tolerated, but which can generally be supplied by the draftsman who knows how to use the tables in the construction hand-books. Herein lies the cause for a regrettable lack of sympathy between architect and engineer, a circumstance more potent than any we know to work to the detriment of both architectural and engineering work.

If only the architect were a little more of an engineer and the engineer a little more of an architect, what opportunities would be created for mutual help and progress!

SECTIONAL TOWN PLANNING CONFERENCE.

From the headquarters of the Los Angeles 1910 Movement and Municipal Reference Bureau, comes a prospectus of the first Southwest city planning conference. It is announced to be held in Los Angeles in November. "In the Southwest it is possible to develop," says the prospectus, "a distinctive type of city. We love the open air and sunshine, the broad spaces, the flowers and fruits, and mission style of architecture. The closely built up city is not to our liking." To promote the planning of this indigenous type of town, the city planning conference for that section has been proposed. There are to be sessions covering three days and an exhibit. The experiment will be watched with interest. It is to be tried under good auspices, and the idea of sectional city planning conferences has much to commend it. The town planning problems in old New England, for example, are quite unlike those of the new cities on the Western plains or those of the South Atlantic seaboard; and while, on the one hand, it is true that no two cities are alike, and on the other, that there are enough problems common to all to justify an occasional national, or even international, gathering, yet the sectional conference, where may be discussed the problems of a like environment, would seem to have special opportunities for helpfulness.

Credit was given, in the November Number, to Butler & Rodman, architects, for a house at No. 13 East 77th Street, New York City. This was unjustly insufficient, for the name of Mr. E. R. Bossange should have appeared as an associate architect.

Credit should be given Messrs. Wurts Brothers for the photographs used to illustrate the "Portfolio of Current Architecture" published in the December issue of The Architectural Record.

The Building Committee of the Perry Memorial announces a competition for the selection of an architect for the memorial which will be erected at Put-in-Bay, South Bass Island, Lake Erie, near the place where Perry's victorious action was fought. The memorial will commemorate not only the victory but the subsequent one hundred years of peace between the United States and Great Britain.

It will consist of a lofty commemorative monument with a museum of historic relics at its base standing in a reservation of fourteen acres. Six hundred thousand dollars will be expended upon the construction of the monument and museum. The reservation will be designed as a suitable setting for the memorial.

The program, which conforms to the principles approved by the American Institute of Architects has been so drawn under the direction of the committee and Mr. Frank Miles Day adviser to the committee, that the problem presented is a most attractive one. Competitors will have the fullest scope for their artistic imagination. The prize of the competition will be the appointment as architect to design and superintend the construction of the memorial. There are also to be three premiums for the authors of the designs placed next to the winner.

The Building Committee will be advised in making its award by a jury of well knows experts.

Architects desiring a copy of the program which sets forth the conditions of participation, should make application to Mr. Webster P. Huntington Secretary to the Building Committee, Federal Building, Cleveland, Ohio.



Vol. XXXI. No. 2 FEBRUARY, 1912 Whole No. 161

THE ARCHITECTVRAL RECORD

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WALTER COOK, ARCHITECT, OF NEW YORK.
PRESIDENT OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THE ARCHITECTVRAL RECORD

FEBRUARY, 1912

VOLUME XXXI NUMBER II

THE WORK OF KILHAM & HOPKINS, ARCHITECTS, OF BOSTON, MASS.

BY HERBERT CROLY

THE ARCHITECTURE of New England, like its life, has within certain limits pursued its own way, independently of the rest of the country. It has on the whole passed through the same phases as has American architecture in its general movement; but it has never gone to the same extremes, and it has preserved a certain continuity of its own. It has always been true to its name. It has always been the most English of the various local divisions of the United States. It has preserved the English tradition with fewer changes in politics and law. It has preserved in architecture, if not the English tradition, at least an English homeliness and unpretentiousness. Boston remains the most English of American cities—the most English and at the same time the most Irish. The alien influences enter in the shape of Italians and Jews, but their effect is not overwhelming as it is in New York. And the alien influence enters in architecture under the guise of young men trained in France; but the results of their training are not allowed free expression. New York may become in part Frenchified—Boston, never.

The root of the special characteristics of New England is, of course, economic. The local economic opportunities, which account for the huge fortunes which have been made in New York and in the Middle West have not existed in New England. The industry of that part of the country has always been organized in comparatively small units and escaped to a considerable extent the passion for combination, which possessed the rest of the country. There is a great deal of wealth in New England, but it is distributed into a larger number of smaller fortunes, and this general condition has had a very considerable effect upon building and architecture. The Bostonian who builds is usually moderate in his ambitions. He has built skyscrapers but not too many of them, and they must not be too high. He has built handsome country houses, but if a country place becomes too big, handsome

and pretentious in the landscape of New England its owner is usually a Western millionaire. New England belongs to the industrial middle class, not to the industrial barons and dukes; and, if a New Englander does become a high industrial aristocrat, he is more likely to disguise the fact than parade it.

The general condition has had its effect, not only on architecture, but on its practice. The prominent Boston firm of architects is likely to have a larger number of, on the whole, smaller buildings to design. These smaller buildings may well be distributed among a much larger variety of types. He is more likely to build up his *clientele* among his college acquaintances or present associates. Personal reasons, rather than the advertisement which his work receives has, perhaps, more to do with an architect's success. The general standard demanded of an architect is probably higher than it is elsewhere in the country; but there are also fewer examples of really distinguished design. The atmosphere is not one which encourages originality or any very daring architectural achievement. Of course, certain obvious exceptions to this general tendency, such as Richardson, will jump to the mind of every one. But on the whole Boston architects tend to confine even their excellences within certain limits. Their work is characterized chiefly by good sense, simplicity, sobriety, self-restraint and conscientious attention to detail both in construction and in design.

In these respects Messrs. Kilham & Hopkins are fairly typical of the better contemporary architectural practice. Both members of the firm received their training at the Massachusetts Institute of Technology. Both of them passed through their apprenticeships in the office of a prominent Boston architectural firm. Since their association they have done a large amount of work and have established an excellent connection; but the work and the connection is almost entirely local—local, that is, not in the sense of being confined to Boston, but in the sense of being confined to New England. Their work has been very varied. It has included schools, churches, dwellings, gardens, plans for real estate development and factories. But none of their buildings individually has been very large or called for the expenditure of a very considerable sum of money. Throughout their career they have lived up to a high standard of excellence in their work, but they have not, on the other hand, made any peculiarly individual contribution to American architecture. They have added to the stock of New England buildings a large number of structures which have served admirably the purpose for which they were erected and which have given prolonged and renewed life to sound local traditions.

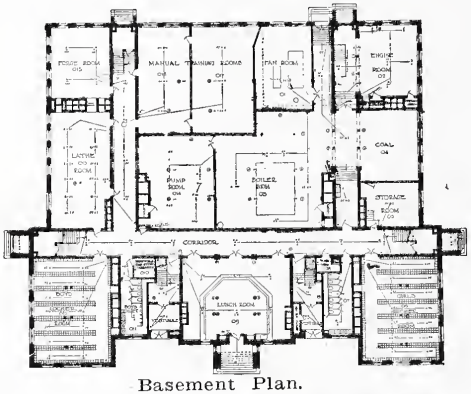
In the collection of Messrs. Kilham & Hopkins' work, published herewith, their schools look more numerous and more conspicuous than any other single class of building, and certainly there is none of their work for which its authors deserve to be more cordially congratulated. The school building intended for the accommodation of a thousand or more pupils is not an easy architectural problem. The building must, of course, be spacious and large; it must conform to practical requirements as severe and rigid as those which determine a warehouse; it must at the same time have some measure of attractiveness and dignity in its appearance; and all these conditions must usually be met out of a by no means abundant appropriation. The result is, necessarily, a compromise. The highest standards either of construction or of design cannot prevail under such conditions; and an architect must show his good sense and good faith in making the compromise something more than a hodge-podge of conflicting expedients.

An architect of a large New England school has, however, the advantage of a certain established type from which he cannot very widely depart, and this type represents an acceptable working compromise among the divergent practical and aesthetic requirements. The influence of the work done for the city of Boston can be plainly seen in the school houses which Kilham & Hopkins have built in the neighborhood of that city; but their buildings are among the best representatives of the type. The amount

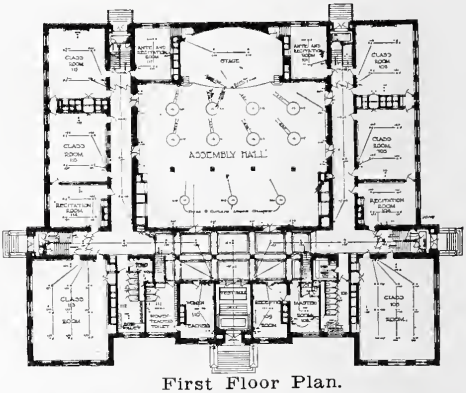


SALEM HIGH SCHOOL, SALEM, MASS.
KILHAM & HOPKINS, ARCHITECTS.

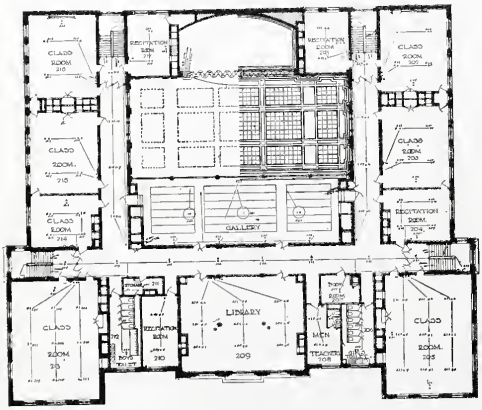
of their appropriations were such that they could not make the structures technically fireproof; but they succeeded none the less in making for practical purposes almost as good as fireproof buildings. They are of solid brick masonry construction, because the architects found it convenient and expeditious not to call in too many sub-contractors and different classes of mechanics. The way, to which access is to be had through to the open air. Such a method of construction is so nearly safe that it may be doubted whether the additional outlay required by making it absolutely fireproof would really be worth the spending. In the reaction against dangerous and flimsy methods of construction, American engineers have tended to demand a standard of fireproofing



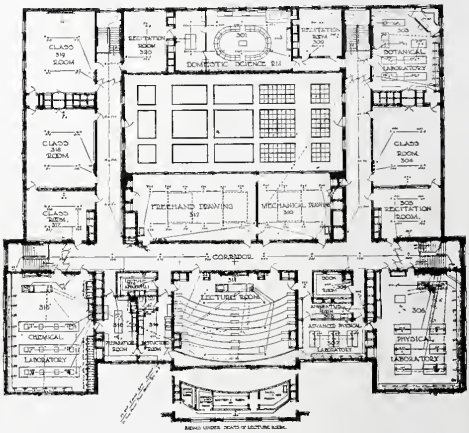
Basement Plan.



First Floor Plan.



Second Floor Plan.



Third Floor Plan.

SALEM HIGH SCHOOL

Salem, Mass.

Kilham & Hopkins, Architects.

floor-beams are, however, not steel, but wood; yet, in this respect they are just as fireproof as the better class of French building—which rarely, if ever, burns down. At worst a fire would spread very slowly in such a building, and the size of the exits would give the school children abundant time to escape. Moreover, these buildings all include an absolutely fireproof tower, containing a stair- which makes construction extremely expensive and adds an unnecessary burden to public and private building. It is characteristic of the good sense and the thriftiness prevailing in New England that the fair workable compromise of a slow-burning construction should have been more generally used than elsewhere in the country.

A school building, is, of course, the



ASSEMBLY HALL FROM THE STAGE.



MAIN LOBBY,
THE SALEM HIGH SCHOOL, SALEM, MASS.
Kilham & Hopkins, Architects.

result of adding together a large number of rooms, substantially equal in size, and provided with substantially the same amount of air and light. The plan, consequently, becomes of necessity pretty well standardized. The depth of the building is usually confined to two rooms, with a corridor between them, and this unit can be duplicated just as far as the building plot will allow. If the lot is spacious and square, the long, shallow buildings

The necessary limitations of the foregoing plan do not leave very much opportunity for well-scaled design. The dimensions of the building are considerable, its openings numerous and large, and its cost necessarily moderate. In the West a tendency has existed to give large schools a semi-monumental character, but any such attempt is out of keeping, both with the plan of a school and its purpose. Wherever possible, a school



MAIN ENTRANCE—HAVERHILL HIGH SCHOOL.
Kilham & Hopkins, Architects.
Haverhill, Mass.

may be arranged around a court. If it is rectangular, but still fairly deep, wings may be added at either end. The only additional complication called for by the plan is an assembly hall large enough to accommodate at one time all or almost all the pupils in the school. In some instances, these halls are so situated that they can be given direct and immediate exits to the street and thus be used to accommodate meetings held on behalf of local civic purposes.

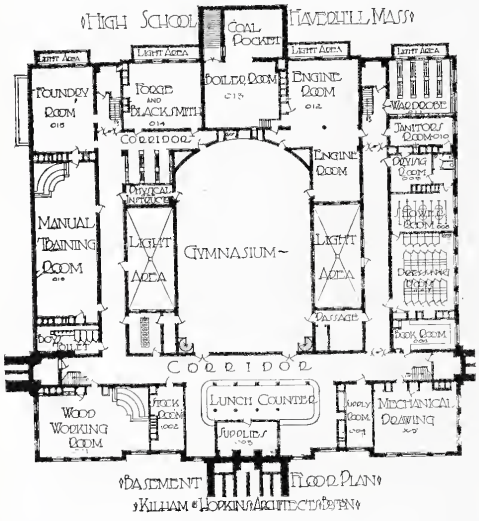
building should be made pleasing and dignified; but it should not be made imposing. It is, however, extremely difficult to make buildings as large as those illustrated herewith pleasant to look at and inviting to enter. Their dimensions are out of keeping with the character, which has usually been associated with collegiate and other educational buildings. Under such conditions the best compromise seems to be to accept the limitations frankly and to give the exterior of the



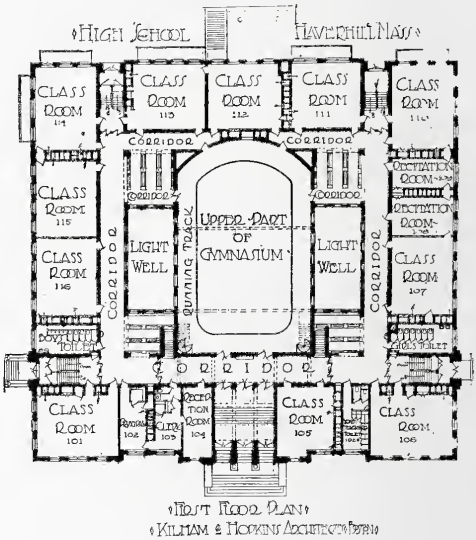
THE HAVERHILL HIGH SCHOOL, HAVERHILL, MASSACHUSETTS. KILHAM & HOPKINS, ARCH'TS.

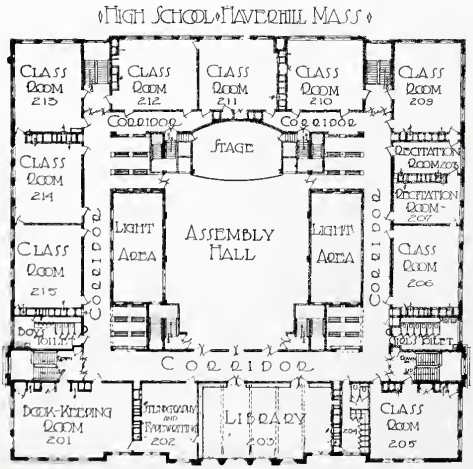
large school a simplicity and economy of effect analogous to the simplicity and economy of the school room.

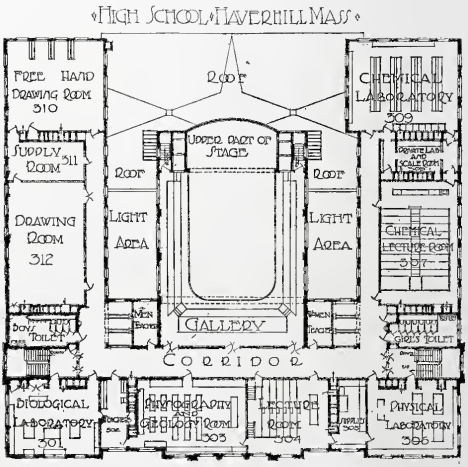
Something of this kind is what Messrs. Kilham & Hopkins have done, and done



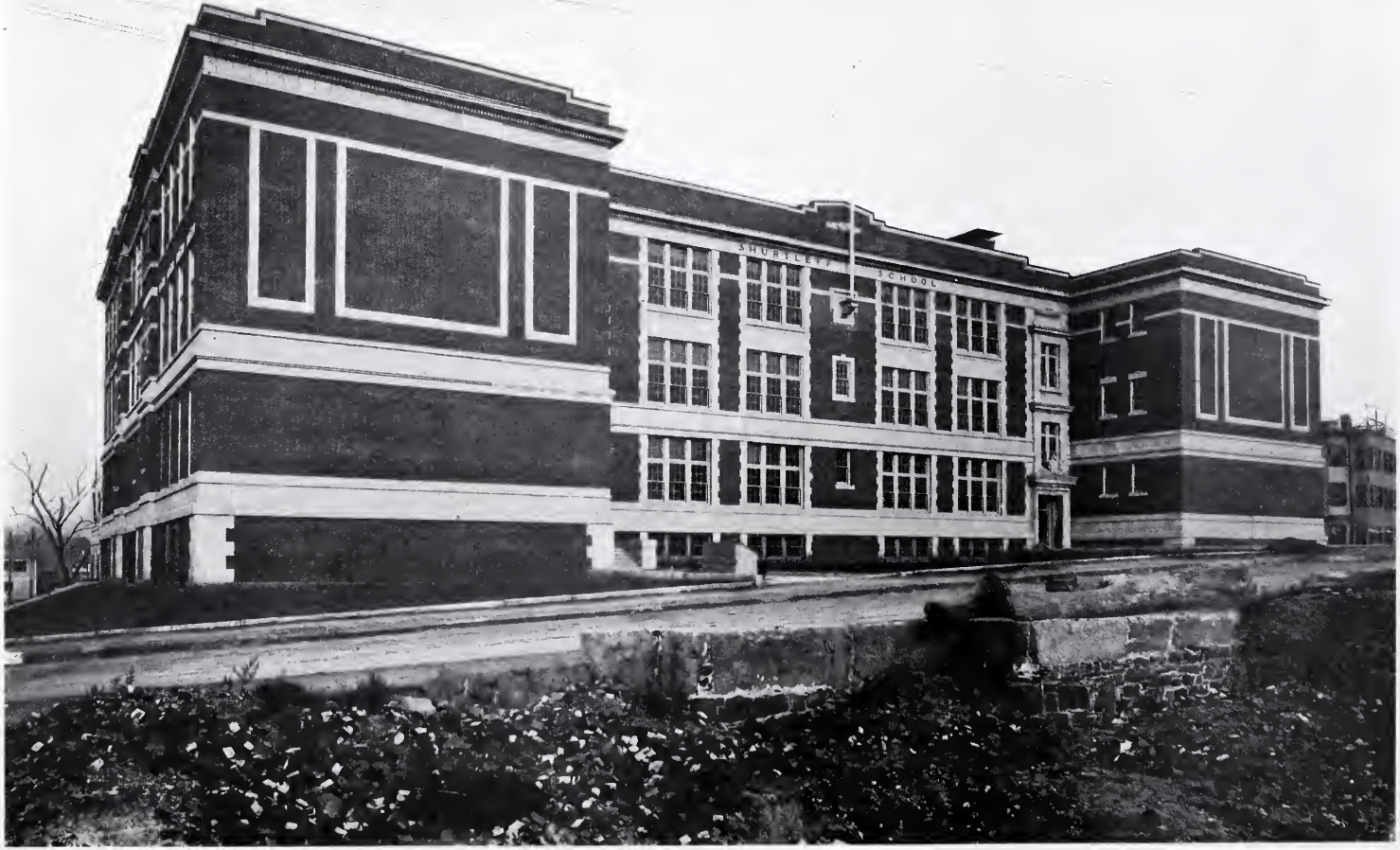
But, confined as they were to brick by considerations of economy, Messrs. Kilham & Hopkins have made their school houses attractive as they could without any sacrifice of practical requirements.



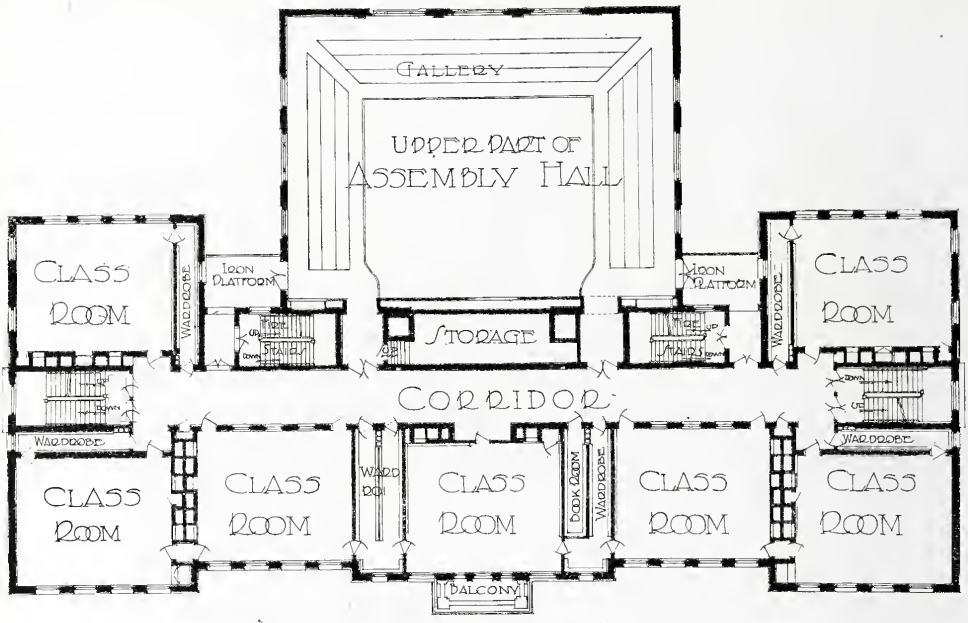




very well. If they had been able to use stone rather than brick, they might have obtained an increase of dignity without any loss of simplicity or propriety. There is always something incongruous, at least to the writer, in the use of brick for any very large building—except one devoted to exclusively business purposes. They suggest unmistakably a communal or a social function for the buildings, but a function to which any architectural display would have been as obnoxious as any suggestion of extravagance. The characteristic of the designs are frankness, simplicity, under- rather than over-ornamentation, and with all



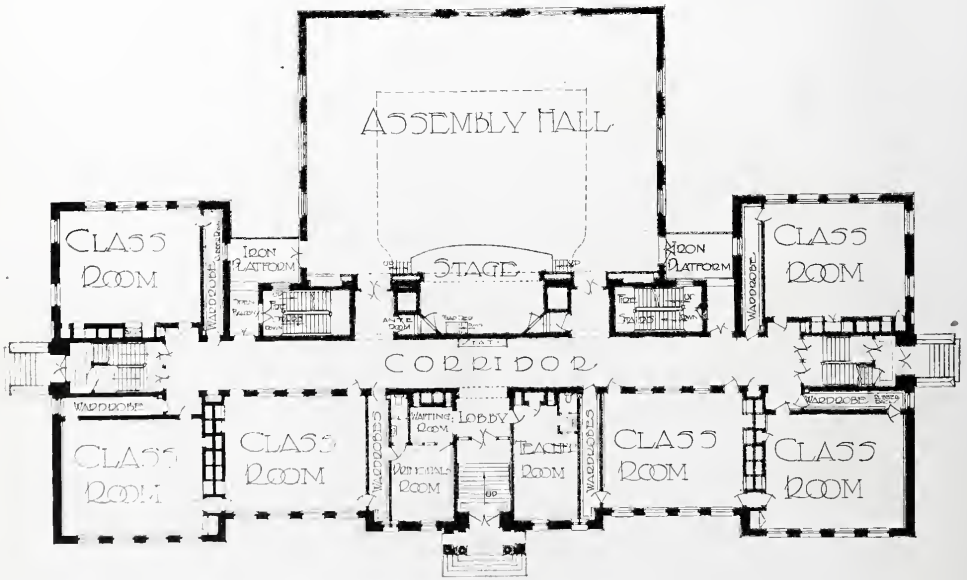
THE SHURTLEFF SCHOOL—CITY OF CHELSEA, MASS. KILHAM & HOPKINS, ARCH'TS.



SECOND FLOOR PLAN.

just a sufficient suggestion that the buildings are dedicated to a liberal rather than to a merely practical purpose.

Perhaps the least successful of these buildings in design is the Shurtleff School in Chelsea. In the façade of this building a not entirely successful attempt was made to group the windows, while the wall was broken by a heavy course of terra cotta between the first and second stories. At the same time, the architects did not try to emphasize the entrances,



FIRST FLOOR PLAN.

WILLIAMS SCHOOL—BROOKLINE, MASS.
Kilham & Hopkins, Architects.



WILLIAMS SCHOOL, BROOKLINE, MASS.
Kilham & Hopkins, Architects.

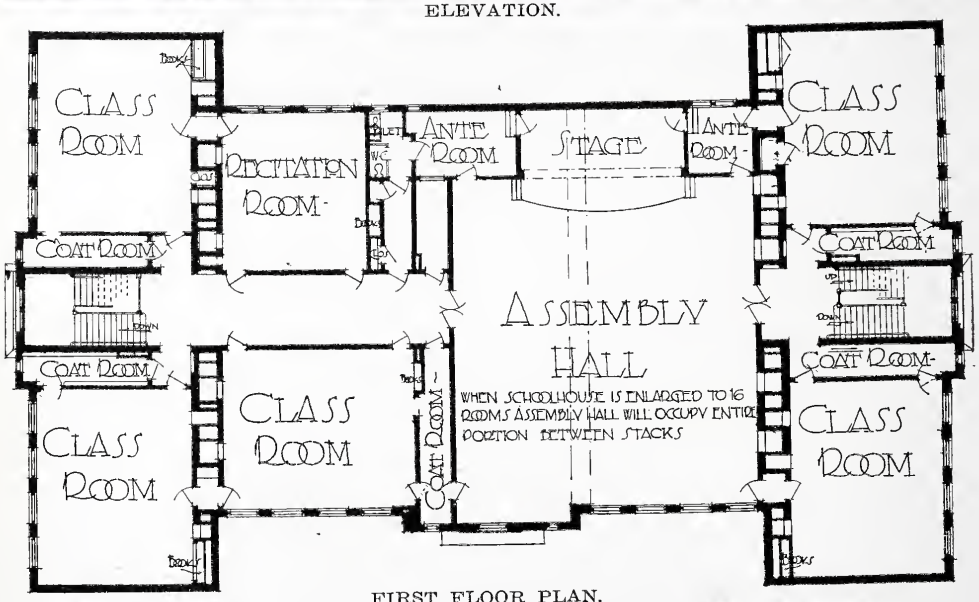
which were situated in the angles formed by the wings, and look unnecessarily insignificant. One has only to compare the façade of this building with the drawing of the façade of the addition to the same school in order to appreciate how much the architects had gained in their mastery of the problem in the interval between the construction of the two buildings. The High School in Salem is a decided improvement upon the Shurtleff School. There is a centrally situated entrance, approached from the street level by several flights of steps, and this entrance is merely the middle of a strong and discreetly ornamented vertical division of the façade, in which the openings have been grouped in the interest of a



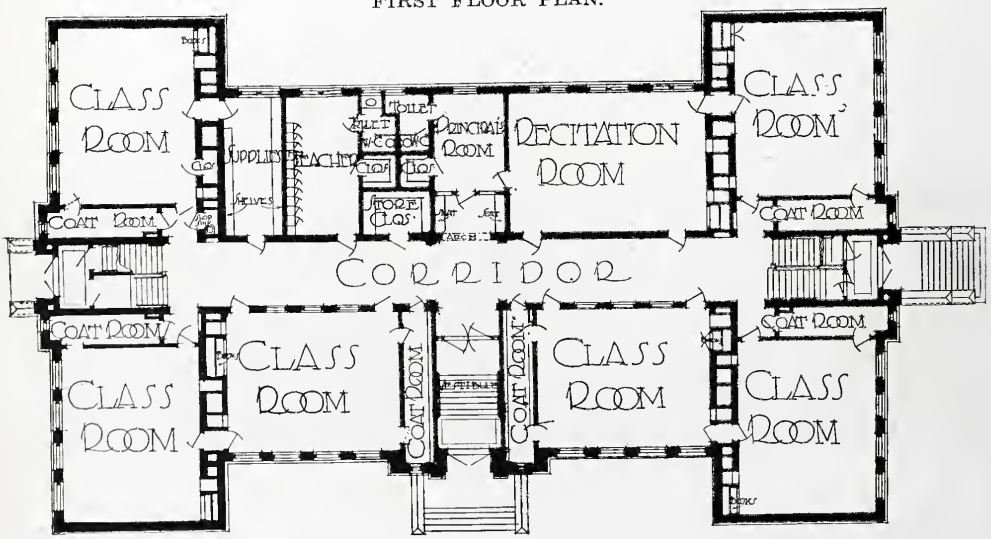
THE MICHAEL DRISCOLL SCHOOL.
Brookline, Mass. Kilham & Hopkins, Architects.



ELEVATION.



FIRST FLOOR PLAN.



SECOND FLOOR PLAN.

SCHOOL BUILDING, MILTON, MASS.
Kilham & Hopkins, Architects.



NEW FIRST CONGREGATIONAL CHURCH,
Hyde Park, Mass. Kilham & Hopkins, Architects.

more interesting and substantial effect. One still gets the sense of too many terra cotta lines, and the entrance itself might have been somewhat heavier, as the crowning feature of an imposing stairway; but these are only slight blemishes on a very competent and workmanlike piece of design.

Still better is the Williams School in Chelsea. The elements of this façade are substantially the same as those of the Salem High School; but the treat-



THE UNITARIAN CHURCH, MARBLEHEAD, MASS.
Kilham & Hopkins, Architects.



CHURCH AT CHELSEA, MASS.
Kilham & Hopkins, Architects.

ment is somewhat better in detail. In spite of its larger dimensions and its remorseless array of windows, the building makes, I think, a more pleasing impression, chiefly because the central division of the façade and the entrances are better managed. The same general idea has received a further development in the Haverhill High School, which is the largest and naturally the most institutional-looking of all these buildings. In this case the central division of the façade is still more elaborate and dignified, and the triply arched entrance has been very skillfully designed as an architectural setting for Michaelangelo's figure of "The Thinker."



FIRE STATION—BEVERLY, MASS.
Kilham & Hopkins, Architects.

Wherever a school building, however, becomes less institutional-looking in size and appearance, an opportunity is afforded of putting more feeling into the design, and whenever Kilham & Hopkins have enjoyed such an opportunity, they have taken advantage of it. The two-story school at Milton is, I think, actually more attractive than any of the above-mentioned buildings; and this increased attractiveness is doubtless due, partly, to the fewer elements in the design and its consequently increased simplicity, and partly because the size of the building, coupled with the unpretentiousness of its treatment, gives it a semi-domestic as-



SIMPLEX ELECTRICAL CO.
Kilham & Hopkins, Architects.

pect. In the case of the Michael F. Driscoll School, in Brookline, the semi-domestic or collegiate effect becomes still more conspicuous. In this building the architect had real wall-spaces and a roof to manipulate, and the result is assuredly most attractive. Indeed, the writer knows of few schools in this country that are more attractive.

There are three churches designed by Kilham & Hopkins which are illustrated herewith; and one cannot help wishing that they were more numerous, for all three are full of character. Of the three, perhaps the most interesting is the little Unitarian Church at Marblehead.

The building is an idiomatic and delightful adaptation of the old New

England meeting-house, which in this instance has obtained increased propriety and charm from its modest dimensions. The other two churches are also small, but they are all the better, because they are small. They are really late English Gothic chapels, with all the massive depth and stretch of wall appropriate to the type. They are designed with lively feeling for the architectural values inherent in this phase of Gothic, which is semi-domestic in character and which associates religion with moral piety rather than with the peculiar rites and ceremonies of any particular church.

As in the case of practically all American architects who have not specialized in a particular class of building, the largest single division of Messrs. Kilham & Hopkins' work consists of domestic buildings. The houses are of many kinds. They include the Beacon Street residence, the spacious country house, surrounded by gardens and grounds, the suburban country house, and the unpretentious bungalow. None of the houses compare in elaboration and expense with those which are built by New York architects with a standing corresponding to that of Kilham & Hopkins; but they are the more typical for that reason. They are the homes of average well-to-do Americans, not of people whose needs and tastes are very exceptional. The consequence is that these dwellings, both individually and in the mass, are somewhat lacking in distinction; but, if they do not inspire any great aesthetic enthusiasm, they certainly fill one with most thorough respect for both their owners and architects.

Of particular interest are the four dwellings situated near Boston in the suburbs. They constitute an excellent



THE C. N. WALLACE HOUSE,
Boston, Mass. Kilham & Hopkins, Architects.



HOUSE OF J. H. DUER, ESQ., BROOKLINE, MASS. KILHAM & HOPKINS, ARCH'TS.



RESIDENCE OF DR. CHARLES F. PAINTER, NEWTON, MASSACHUSETTS. KILHAM & HOPKINS, ARCH'TS.



THE HOUSE OF B. F. PITMAN, ESQ. BROOKLINE, MASS. KILHAM & HOPKINS, ARCH'TS.



HOUSE OF R. A. STEWART, ESQ., BROOKLINE, MASS. KILHAM & HOPKINS, ARCH'TS.

solution of the problem of the suburban residence—both in its economic and aesthetic aspect. In the first place they all contain a very large amount of habitable space, so arranged that it can be built at a comparatively small cost and can be heated with the least possible expense. That is, they are all three-story buildings with a maximum number of convenient rooms, arranged over a foundation of minimum extent. In the second place they all create an effect of homeliness, comfort and ease, but the homeliness is not without good taste and distinction, and the ease carries no suggestion of waste and extravagance. Finally, they all belong architecturally to the very satisfactory type of New England Colonial town house—which is at any rate, for New England, the best type to which a suburban house can conform. It awakens grateful associations, and it is eminently practical and appropriate.

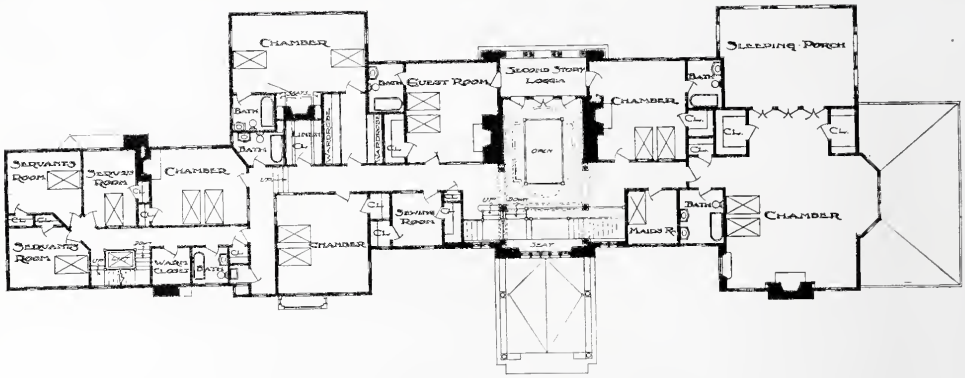
These four dwellings are so much alike, and they are all so good, that one scarcely knows which to prefer. The Duer house in Brookline is distinguished because its façade runs at right angles to the street, and because it is a plaster instead of a wooden building. Its more substantial material gives it perhaps an added dignity while its location permits of a more attractive treatment of the grounds. The Painter house at Newton, on the other hand, is distinguished by the fact that it is situated further back from the street than usual and more above grade. The house of Mr. R. A. Stewart in Brookline is also somewhat above grade and is, in the opinion of the writer, a shade pleasanter in appearance than are the other members of this group. Its peculiarity consists in pyramidal roof, with dormers on four sides instead of two. The relation between the dormer and the brick chimney on the



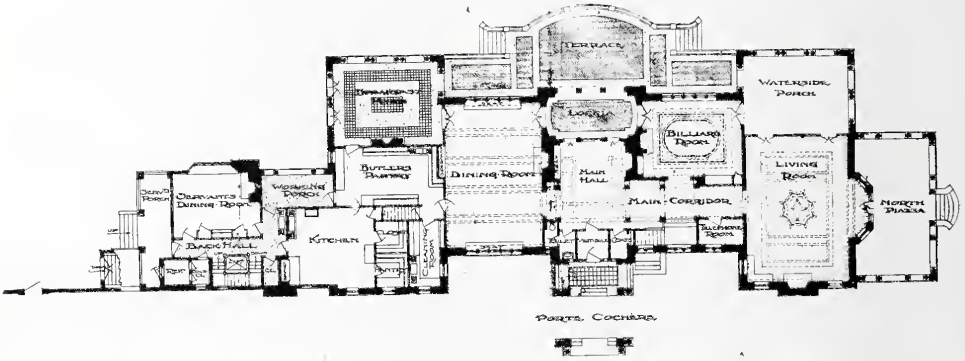
FLOOR PLANS—HOUSE FOR CHARLES P. SEARLE, ESQ.
Ipswich, Mass. Kilham & Hopkins, Architects.



TERRACE FRONT—HOUSE FOR C. P. SEARLE, ESQ., IPSWICH, MASS. KILHAM & HOPKINS, ARCH'TS.



SECOND FLOOR PLAN.



FIRST FLOOR PLAN.



CHAMBER.

"BLITHEWOLD," PROPERTY OF WM. L. McKEE, ESQ.
Bristol, R. I. Kilham & Hopkins, Architects.



EAST SIDE OF "BLITHEWOLD"—PROPERTY OF WM. L. McKEE, ESQ., AT BRISTOL, R. I. KILHAM & HOPKINS, ARCHITECTS.



PRESIDENT FINLEY'S BUNGALOW AT TANWORTH, N. H.
Kilham & Hopkins, Architects.



GATE LODGE FOR E. A. CLARK, ESQ.
Jamaica Plain, Mass.
Kilham & Hopkins, Architects.

short side of the building is bad; but, apart from this blemish, there is something exceptionally compact and neat about the whole design. The fore-court would probably have looked better in case the picket fence and the wall could have been continued along the terrace; but as it stands it is very attractive. The distinguishing feature of the house of Mr. B. F. Pitman in Brookline is the enclosure of the grounds by a very well-designed picket fence—which is so successful that its omission in case of some of the other houses is bound to cause regret. A suburban house is nearly always improved in appearance by the architectural enclosure of the grounds, and it is a pity that so many Americans dislike the idea of such enclosure.



Photo by Thomas Sears.

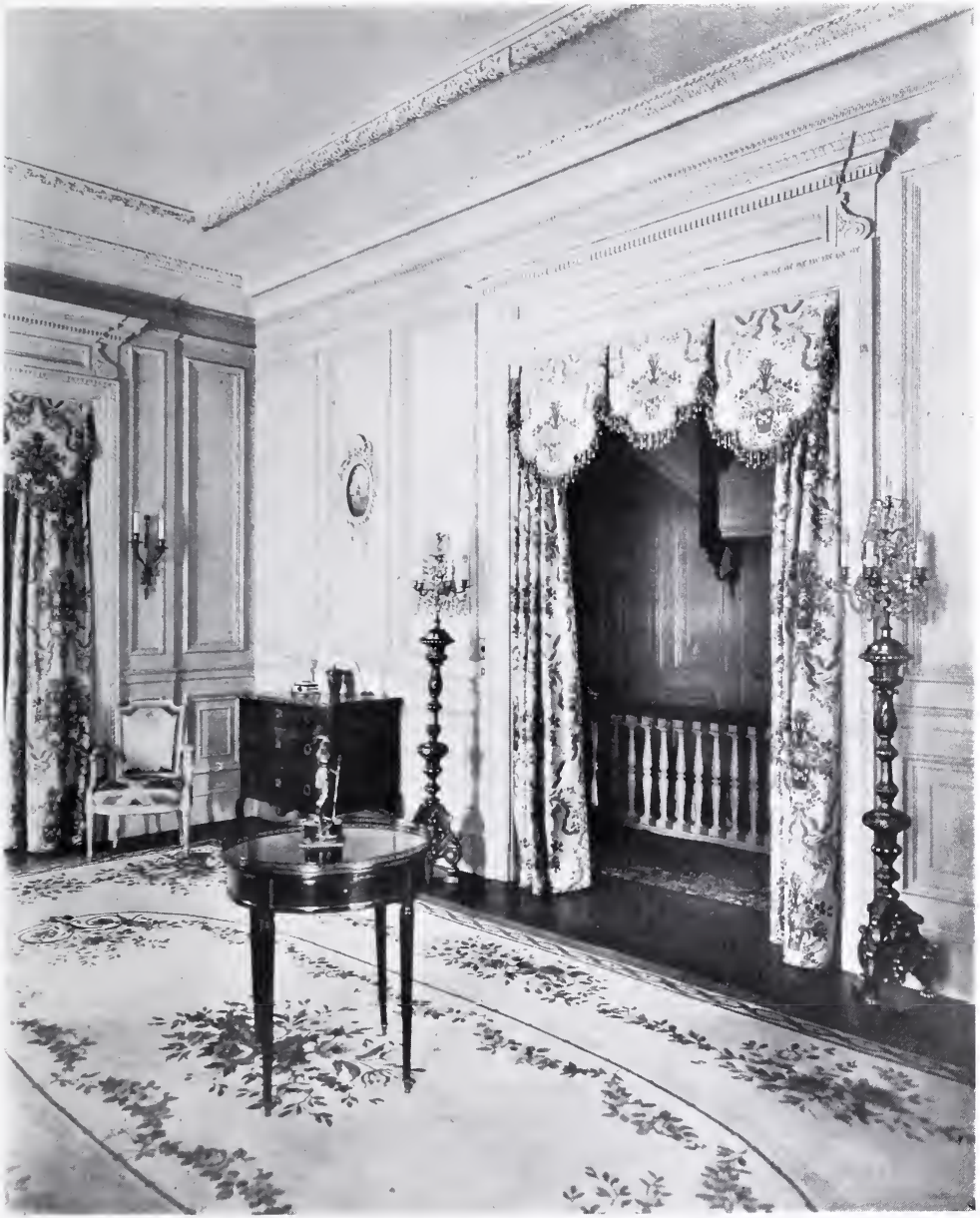
GARAGE, COMBINED WITH COACHMAN'S AND CHAUFFEUR'S COTTAGES.
Bristol, R. I. Kilham & Hopkins, Architects.

As a rule, architects would tend to improve the quality of their work in case they would more frequently adopt the course followed by Messrs. Kilham & Hopkins in designing these suburban houses. Wherever possible, a certain type of plan and design, covering the standard requirements, should be worked out, and this typical solution of the problem should be varied in each case to meet either special conditions or the special tastes of particular clients. The architect is enabled in this way to obtain a comparatively complete mastery of one type, and his work becomes firmer in general design and more delicate in detail. Of course, the varying tastes of different clients frequently interfere with any such continuity of type, but the architects themselves too often fail to understand that they gain more from gradually improving a single typical model than they do by experimenting with many models.

If Messrs. Kilham & Hopkins' schools and suburban houses illustrate their ability to provide an excellent typical solution for certain standard architectural problems, their country houses exhibit their talent in a much more versatile aspect. Probably the best of their country houses is that of Mr. Chas. P. Searle,



HOUSE FOR DR. J. L. BREMER, COHASSET, MASS. KILHAM & HOPKINS, ARCHITECTS.



RECEPTION ROOM—RESIDENCE OF WM. L. McKEE, ESQ., BOSTON, MASS. KILHAM & HOPKINS, ARCHITECTS.



SUMMER SCHOOL OF CIVIL ENGINEERING— MASSACHUSETTS INSTITUTE OF TECHNOLOGY.
Gardner Lake, Maine. Kilham & Hopkins, Architects.



SKETCH OF SUMMER HOUSE.
Kilham & Hopkins, Architects.



FARM BUILDINGS FOR REV. WM. M. CRANE, RICHMOND, MASSACHUSETTS.
Kilham & Hopkins, Architects.

situated at Ipswich, Mass. This is a thoroughly good example of an Italian villa with a formal treatment of the grounds immediately around the house. The photograph of this villa does not do it entire justice, because the terrace is not furnished with the bay trees and other signs of habitation which it needs; but these deficiencies can easily be supplied. Italian villas are not very numerous on the Massachusetts coast, and this is one of the best. Less successful is the more elaborate house of Mr. W. T. McKee at Bristol, Rhode Island. The combination of the heavy masonry of the lower story with the stucco of the story above is not very good. Presumably, the architects did not have as much their own way as they would like in the design of this house. From the samples given of the interior one may infer that its rooms are both handsome and very well designed. Indeed, that particular type of dwelling very often furnishes the architect with the opportunity of designing a series of spacious and handsome apartments. Attention should be called also to the delicacy and discretion of some of Messrs. Kilham & Hopkins' other interiors—particularly the reception room of the house on Commonwealth Avenue, in Boston.

One of the severest tests to which an architect can be put is that of designing a house for himself. Their responsibility for their own houses is complete and exclusive. Mr. Hopkins stands the test remarkably well. His house and garden at Dover, Mass., is full of charm. The garden is particularly delightful and has been carefully arranged so as to take advantage of the trees and masses of foliage already growing on the site. It consists in a sort of a mall, terminating in a pool, and surrounded by a screen of foliage and a welter of flowers. The treatment combines formality and informality in a way that requires the utmost tact and real feeling for natural values. The garden of Mrs. W. Scott Fitz at Manchester, Mass., is more formal, but its object again is to enhance the value of certain natural advantages enjoyed by the site. In all Kilham & Hopkins' work there is to be recognized an instinctive sense of architectural propriety which gives each particular design firm ground of its own on which to stand. If they are never very daring, neither are they ever unintelligent, perverse or malapropos. They have accomplished a large volume and a great variety of work and have done all competently, tastefully and with admirable good sense.



RESIDENCE OF JAMES C. HOPKINS, ARCHITECT.
Dover, Mass. Kilham & Hopkins, Architects.



HOUSE AND GARDEN OF J. C. HOPKINS, ARCHITECT.
DOVER, MASS. KILHAM & HOPKINS, ARCHITECTS.



PART OF GARDEN—RESIDENCE OF J. E. HOPKINS, ARCHITECT.
DOVER, MASS. KILHAM & HOPKINS, ARCHITECTS.



THE GARDEN.



Gardener's Cottage and Part of Garden.
ESTATE OF MRS. W. SCOTT FITZ—MANCHESTER, MASS.
Kilham & Hopkins, Architects.



A TRIP IN ASIA MINOR

THE STVDENTS SIDE TRAVEL IN CONNECTION WITH ATHENS & CONSTANTINOPLE



BY
GORHAM PHILLIPS STEVENS

MOST OF THE BOATS from Athens to Constantinople touch at Smyrna; and, if one stops over ten days at the latter port, the ancient Greek cities of Ephesus, Magnesia, Priene, Miletus, Didyma and Pergamon may be visited with comparative ease. The architect, especially, will find continual use for his camera and sketch book.

My friend and I arrived in Smyrna on the 28th of April and started for Ephesus the following morning. For two and a half hours the train passed through a fertile country, with ruins of Roman acqueducts, Turkish mosques and mediæval castles scattered over the landscape. Ephesus, originally situated on a gulf, but, owing to the receding of the sea now about four miles inland, was one of the famous Ionic cities of ancient Greek times. The temple of Ephesus, the Artemision, was considered one of the seven wonders of the world. This the English have excavated, and they have found wonderful sculptural and architectural fragments (now preserved in the British Museum). The steps of the temple were some ten feet below the present surface of the earth and in such a marshy locality that powerful steam pumps were at work keeping the excavation free from water. The archæologist in charge was bed-ridden with malaria brought on by the unhealthy condition of the neighborhood; yet he graciously received us and saw that the architect attached to his expedition should show us the interesting things that had been found. In 356 B. C. and on the very night of the birth of Alexander the Great, an obscure Ephesian, called Erostratos, wishing to make his name immortal, succeeded in burning this wonderful temple to the ground. The outraged Ephesians passed a decree forbidding anyone to mention his name under pain of death—the best way of assuring him of immortality, for this name has become generally accepted in designating those who commit a senseless act in the hope of becoming famous.

In Roman times also Ephesus played an important part. Here St. Paul stayed some time—witness his Epistles to the Ephesians. There are well preserved ruins of a stadium, a theatre (Fig. 1), extensive baths, an odeion (intended for musical performances), a library, markets, etc., all of the Roman period. The Austrians were excavating this part of the city.

In addition to a large castle, dating back to Byzantine times, there are ruins of fourteen mosques—a silent testimonial to the importance of the city in early Turkish times. The Selim mosque of 1375 is a chef d'ouvre of Turkish work.

All that Ephesus can boast of to-day is a small village near the railroad station; and in no other ruins of Asia Minor can one better read the history of a big, proud city—a history in which the last drama has been played and at which the archæologists, the biographers of antiquity, are busily working.

It was only an hour and a half by rail from Ephesus to Magnesia; but here, although there was much of interest to be seen, we will not detain the

reader, as the character of the "finds" and the general layout of the city were similar to those of Priene.

After Magnesia we pushed on to Sokia, one hour more, where we reached the end of the railroad. Here we hired horses. We were advised to take advantage of an armed courier who was traveling in our direction, as there were brigands in the mountains along our route who had occasionally been known to descend upon lone travelers. This we did accordingly, and the brigands (if there were any) stayed at a respectful distance. The route to Priene lay along the valley of the Mæander, and out in the fertile plains we could see nomadic herdsmen picturesquely dressed in flowing robes of bright colors, all of them mounted and carrying rifles to protect their property. Their tents were scattered over the plain, and occasionally we caught glimpses of their wives and children. What was of special interest were the herds of camels, young and old; a baby camel frisking about on his native hearth is a sight worth going a long way to see.

After riding three hours we reached the site of Priene, a wonderful example of a Hellenistic provincial town of about 4,000 inhabitants. The city was built on terraces rising from the valley of the Mæander, with a lofty acropolis crowning all. The river twists in the plain at one's feet and finally reaches the sea, which, here too, has receded a number of miles since antiquity. The walls about the city were over six feet thick, all of squared stones. The streets were methodically laid out at right angles to one another, and in many places this had necessitated much rock cutting. The principal streets were from twenty to twenty-three feet wide, and their drainage was carefully looked after. The private houses, all of which had been uncovered, revealed the fact that Greek houses of this (Hellenistic) period were very similar to those of Pompeii in wall decoration, in the open interior courts for light and air (see Fig. 2) and in furniture.

In the centre of the town was the market place—an open square, 426 feet by 316 feet, surrounded on three sides



FIG. 1. THEATRE AT EPHESUS.

with deep Doric colonnades, while on the fourth side, the east side, was a sanctuary of Asklepios, consisting of an Ionic temple in a court of its own. The open part of the square was embellished with altars, statues, exhedræ and trees. Back of the colonnade on the north side of the square were the law courts and the bouleuterion (a building devoted to the meeting of the town officials and to public gatherings). On another terrace to the north was a temple dedicated to Athena —an Ionic temple with six columns on the front and eleven on the side. The theatre, open to the sky, like all Greek theatres, was especially well preserved. The stadium, being situated on the slope of the hill, had seats only on the side toward the Acropolis, leaving an unobstructed view over the plain and avoiding the expensive construction of seats where the land fell away. The gymnasium, too, was exceedingly interesting. We could see the rooms where the young athletes used to box and wrestle, and where they bathed (Fig. 3). The stone walls were still covered with the names of these young fellows, just where each one had rudely cut his name so many years ago.

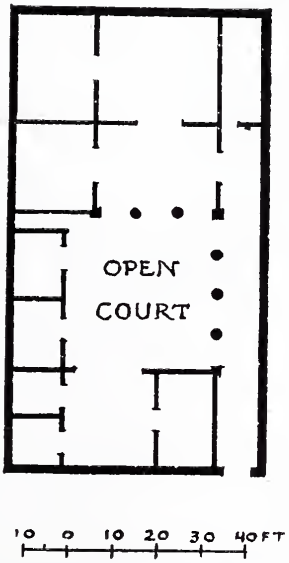


FIG. 2. HOUSE AT PRIENE.

Priene has been excavated in a masterly way by the Germans, and travelers are hospitably given lodgings in a house which the excavators lived in while operations were in progress. I must not forget to say that the man who looked after the excavations was an ex-brigand, but a man who had proved himself thoroughly reliable.

Miletus was within sight of Priene, lying across the valley at about a distance of ten miles. The Mæander overflows its banks in spring, so that in March and April one crosses by boat. We found the waters still high in places and were three hours on horse back in making the journey.

Miletus was within sight of Priene, lying on the



FIG. 3. BATHING ROOM—GYMNASIUM AT PRIENE.



FIG. 5. MOSQUE AT MILETUS.

coast. Here, too, the sea has left it five miles inland; but one can still see where the ancient harbor was located. The city passed through almost every possible vicissitude—oppression by tyrants, capture by the Persians, subjugation in turn by the Athenians, the Spartans, Alexander the Great, the Romans and the Barbarians; finally a Byzantine state was overwhelmed by the Mohammedans. The theatre of Roman times is still fairly well preserved, and its frontage of 466 feet speaks for itself. The market place, bouleuterion, baths, stadium, streets at right angles to each other, town walls and gates all recall Priene, but on a more magnificent scale. The mosque, built in 1501, is a jewel of Turkish work (Figs. 4 and 5).

Our next ancient site was Didyma—a rival of Delphi in the worship of Apollo. Passing out from Miletus to the south, we followed an ancient sacred road, which skirted the sea for some distance, and reached the little village of Didyma after three hours of delightful riding. Up to the present, the temple, excavated by the French, has been the only thing to see; the Germans are now excavating the site more thoroughly.

The vast temple was never completely finished. It had a double row of ten Ionic columns, 64 feet high across the front and rear, and a double row of twenty-one columns along the sides. The top step measured 360 feet by 163 feet. The bases of the columns on the front presented the peculiarity of five different types, the arrangement being that similar types occupied symmetrical positions with regard to the axis of the temple (Figs. 6, 7, 8, 9 and 10). In fact, this interesting variety was characteristic of many other parts of this huge temple.

To go to Pergamon one is obliged to start afresh from Smyrna.

Our trip back to the latter place was uneventful, except that we met two friends who had just been arrested in Aiden, a town on the route to Sardis; and this happened in the following way: They were both archæologists, and, as they were poking about town, they saw some Greek inscriptions built into the wall of a court; so they knocked for permission to enter, but without any result at first. Now, archæologists are persistent. Finally a head was thrust out of an upper window, and a shriek rent the air. Soon a number of

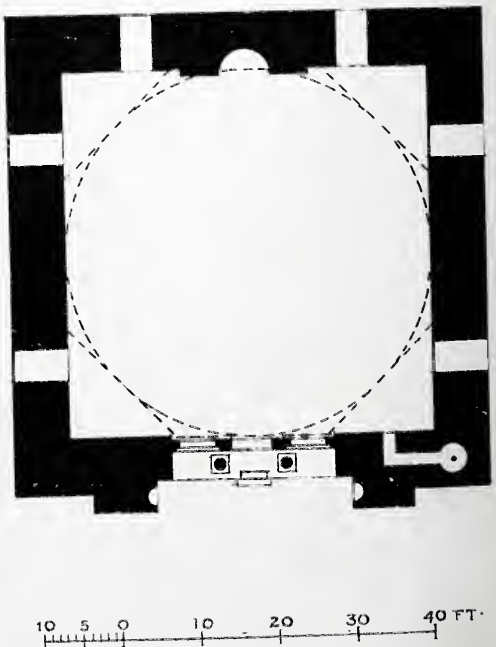


FIG. 4. PLAN OF MOSQUE AT MILETUS.
Measured and Drawn by G. P. S.

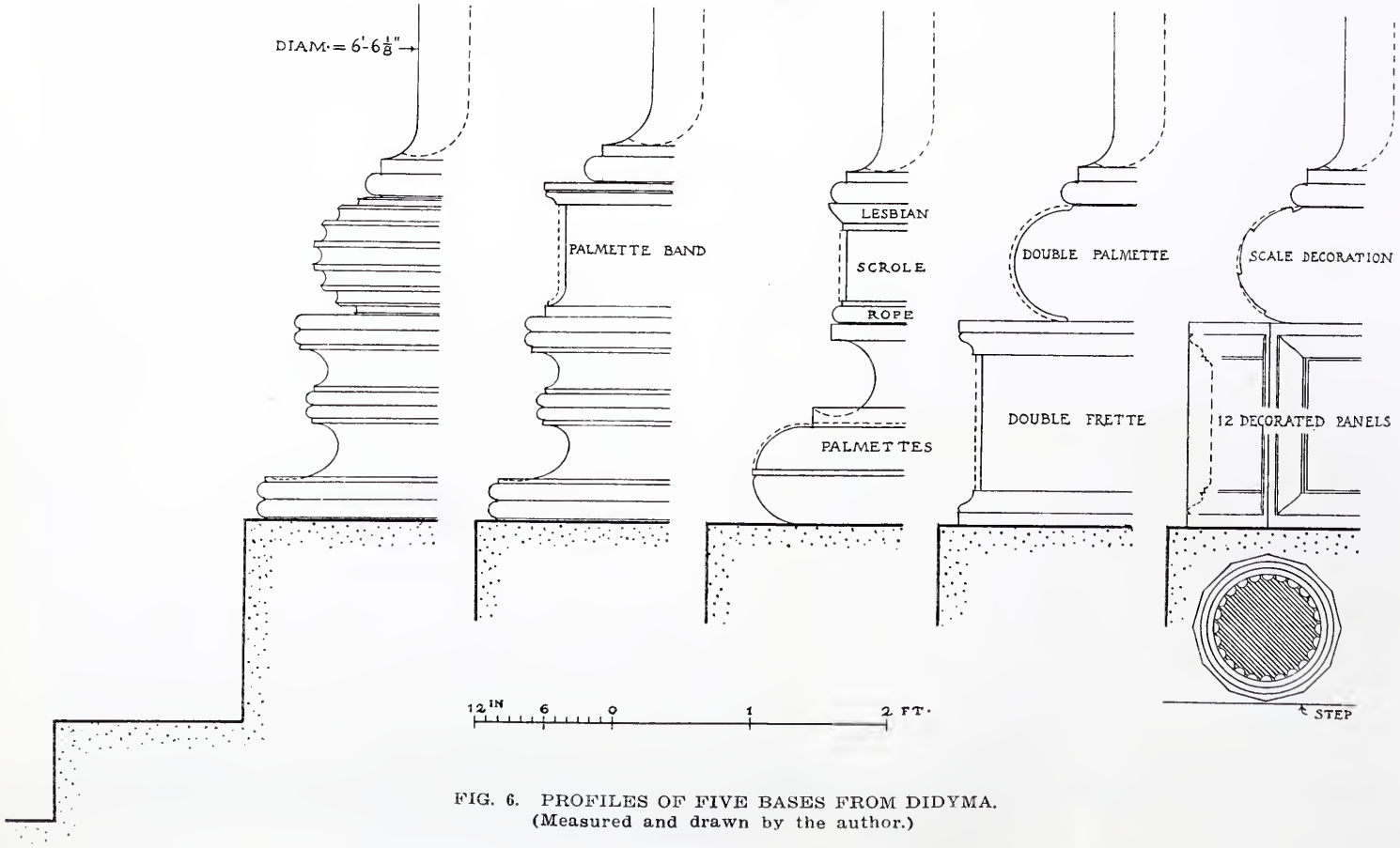


FIG. 6. PROFILES OF FIVE BASES FROM DIDYMA.
(Measured and drawn by the author.)

Turkish soldiers were on the scene, and my two friends were forthwith arrested and carried before the governor of the town. It took some time for our archæologists to explain their actions, as they did not speak Turkish, and the Turks spoke nothing else. But, at the end of two hours a Greek interpreter was found, and the mystery cleared up. My friends had tried to enter the harem belonging to the governor himself. As soon as he found out what nationality they were and what they had been looking for, the governor detailed a soldier to take them wherever they might want to go, and, further, instructed this bodyguard not to pass a café without insisting upon their taking a cup of Turkish coffee.



FIG. 7. BASE FROM DIDYMA.

From Smyrna Pergamon is reached either by boat and then a three or four hours' carriage drive, or by rail and a six hours' carriage drive. It is really quicker by boat, but, as the latter did not run every day, we found it more convenient to go by rail. It was a hard day, eight hours in the train and then our six hours' carriage drive. In order to save time, we ate our dinner in the carriage—carriage is too dignified a word to use here, for our pumpkin-seed shaped wagon had no seats and no springs. We were thoughtfully given rugs to sit upon, however. The roads were in a frightful state; and it required no slight degree of skill to drink from a bottle while the wagon was in motion. We rattled into Pergamon at half past twelve at night.

Pergamon is about twenty-five miles inland and is picturesquely situated among the mountains. It was not until the time of Attalus I. (241-197 B. C.) that it became an important place, the little kingdom then playing much the same role that Switzerland does to-day. Under Eumenes II. (197-159 B. C.) the city reached its high water mark, and the



FIG. 8. BASE FROM DIDYMA.



FIG. 9. BASE FROM DIDYMA.

arts and sciences* blossomed forth in an astonishing fashion, its schools of painting and sculpture being particularly famous. The little kingdom was finally absorbed by the Roman Empire, and its history from then on was similar to that of the other cities of Asia Minor. To-day it is a flourishing town of 20,000 inhabitants, half Greek, half Turkish.

In ancient times the poorer quarters of the city lay at the foot of a lofty acropolis; it is only this latter which has been so far excavated, again by the Germans. The general scheme of the acropolis was a series of terraces supported by lofty retaining walls and connected by a zig-zag paved road, 16 feet wide. After passing through a propylæa at the south of the acropolis, one entered a market place; then, on the next terrace, came the famous great altar of Zeus.† The following terrace contained the palace of the Pergamese kings, and nearby was a Doric temple of Athena. Then came the library and at the extreme north were the royal gardens with a beautiful view over the plain. Returning along the west side of the acropolis one visited first a temple of Trajan of the Corinthian order and raised on a lofty terrace, then the Greek theatre with its seats resting on the slope and with a removable stage in the middle of a comparative narrow terrace, 720 feet long, which was bordered with colonnades where the theatre-goers took shelter when it rained; and there was a charming small Ionic temple at the north end of this same terrace.



FIG. 10. BASE FROM DIDYMA.

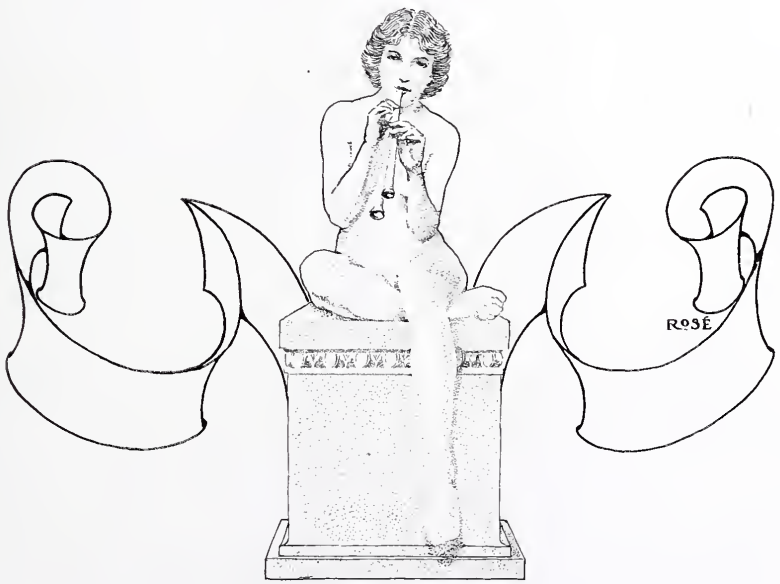
The Roman remains in the lower city are extensive, but so far unexcavated. It happened to be St. George's Day when we were looking at these ruins. St. George's Day is very carefully observed by the Greeks, as it is the "Saint's Day" of King George of Greece. The method

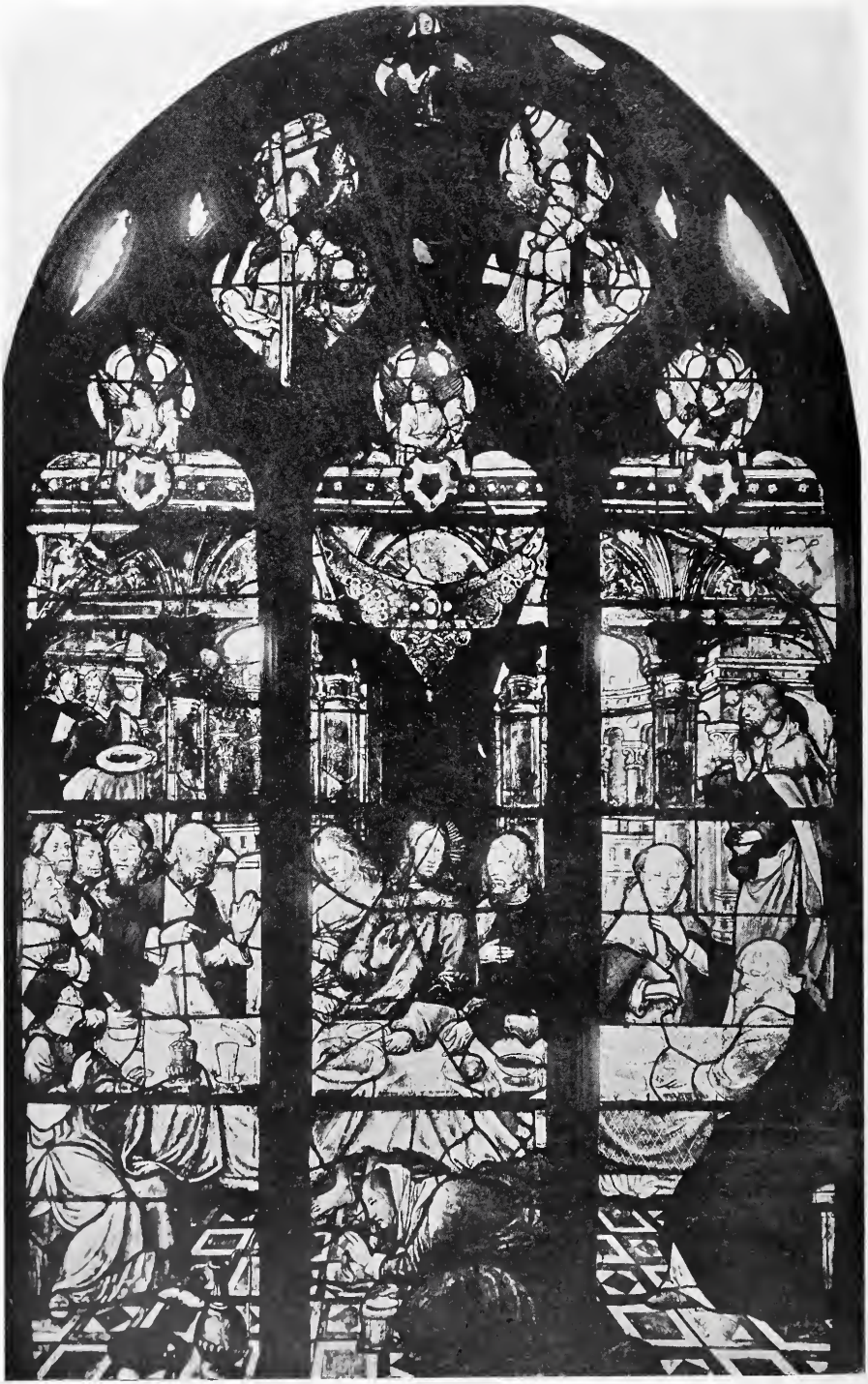
*The royal library numbered 200,000 volumes. It was later carried to Alexandria by Antonius.

†This altar has been reconstructed in the Pergamon Museum at Berlin. Three sides of the basement are decorated with a continuous band of sculpture, in high relief, seven and a half feet high and about 420 feet long, representing a battle between the gods and giants: the fourth side is pierced with steps. Above the basement is an Ionic colonnade surrounding the actual sacrificial altar.

of "celebrating" at Pergamon is as follows: Parties of about a dozen men, mounted and armed with guns, ride single file through the Greek quarter of the town. They are preceded by drummers and flute players making a doleful noise, only slightly suggestive of an air. The procession stops at every house occupied by a Greek sympathizer, and those on horseback are offered wine, and in acknowledgment they shoot off their guns. Some of the men were reeling in their saddles, so we kept at a distance, especially as we saw guns fired in a horizontal position as they lay across the saddles. We thought that the processions must have been much longer at the start.

This Asia Minor trip could have been prolonged to advantage: we found that ten days at least were required for traveling and seeing the principal things in these places. I am sure that those who may take this trip in connection with Athens and Constantinople will feel fully repaid for their time and trouble.

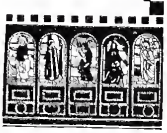




CHURCH OF TRIEL (SEINE-ET-OISE). JESUS AT THE HOUSE OF SIMON.
Influence of the Renaissance Clearly Seen.



EVROPEAN VERSVS AMERICAN COLOR WINDOWS



BY

JOSEPH LAVBER

SOME TWO YEARS AGO discussion arose in the columns of a New York daily relative to the merits or demerits of what is known as the American method versus the European or conventional art of Stained Glass. This discussion was precipitated by the decision of the authorities of the Cathedral of St. John the Divine to have, at least in Belmont Chapel, only windows of European design and make; the reason given, if I remember rightly, being that the latter work was more ecclesiastic and traditional than the American. This decision came like a blow to most of our artists who had made a study of the subject and who felt that an American cathedral should be adorned by the best of American art. It naturally provoked a storm of protest from a number of artists, some of whom had followed the lead of La Farge, and even from the master himself. Seeing an advantage for themselves, some people who had been most responsible for the commercial exploitation of the art availed themselves of the opportunity; the newspapers noticed this and the discussion was ended. All of this was interesting enough to those of us who had worked for years in glass, but how much of it, we wondered, was clear to the layman? As several great ecclesiastical structures in various parts of the country are nearing completion, a more thorough review of the subject seems timely.

Since the man to whom all American artists owe so much, John La Farge, has passed away—a man who was foremost in the establishment of an art which had become wholly commonplace and "shoppy," on a firm artistic basis, and who has produced works in glass not equalled by any generation—it has become more the fashion than before in certain quarters to decry American art and the use of the rich pot metal and opal glass with which Mr. La Farge was identified, one firm even advertising "No opalescent glass used in this establishment," thus giving the impression that there must be something particularly venomous about it. As this finds preference with most American artists, the objection is reiterated that neither our glass nor our designs are sufficiently "ecclesiastic" nor "traditional." It would be of interest to know just what these critics understand by these terms in art, particularly their definition of "traditional." The latter must be rather perplexing, as the art of Glass underwent such radical changes in its course from the twelfth to the seventeenth century. Do they advocate a return to the healthy methods and rich, full quality achieved by the mediaeval workers or the return to the decadent period of the seventeenth century? If the former, that was achieved here as far back as thirty years ago, to which reference will be made later. When we inquire as to what they understand by "ecclesiastic," we are shown the modern English window, therefore we will have to subject that to some scrutiny. Before we do this, however, let us skip lightly over the centuries without trying to weary the reader.

The glass of the twelfth century was very far from what manufacturers to-day would call perfect. The metallic oxides were mixed with the silicates in the melting pot in a primitive way (on that account called "pot metal" to this day); the color permeated the body of the glass, but in most cases was unevenly fluxed, the same piece showing variations of shade from dark to light; of uneven thickness,

in cases bubbly and striated. The clear glass was anything but clear, being of a horny, nebulous transparency varying from greenish to grayish in tint. Now this may seem very unpromising material to the layman, but any artist can realize the possibilities of the variations of tone and texture and the vibration of light through such medium. How cleverly these men used the material we all know; add to this, richness of design and full leading, using enamel (vitrifiable pigment) not so much for the sake of detail as to further increase the vibration of light, and despite their limited range of color you have the secret. Time has also improved these windows; note the irridescence of some ordinary window panes in very old houses exposed to the sun, and, (is this rank heresy?) the dirt of ages, for it is astonishing how much toning down a color window will stand, and also how much some of the old windows have lost by scientific cleaning.

Art was emerging from the dark ages throughout which the monkish tradition prevailed that flesh was the devil and had to be subjugated; of course the nude was not studied, consequently the draped figure lacked reality; but the use which was made of the figure as they drew it in the decorative scheme of a window, withal telling its story, was admirable. In the following centuries the drawing of the figure improved greatly, but gradually. With the greater skill in painting, the fundamental principles governing glass were lost sight of, the latter also becoming more mechanically perfect, which was not an unmixed blessing, however, as we shall see.

Let us consider these conditions a moment as they have such a direct bearing on modern work. Each art and mode of expression has its advantages and limitations; when we overstep and ignore the latter we invite disaster. So it was in this case: skill and dexterity in the application of stain and pigment on glass had reached a marvellous degree of perfection, with the result that men no longer thought in relation to glass, but pigment; a window became entirely a painter's proposition; where in former times the artist and the craftsman were one, or worked side by side, there was now an utter divorce between the glazier and the "artist"; lead lines were considered a necessary evil and were used sparingly and played little or no part in the design; all this signifying a speedy demoralization. The sincere, simple religious feeling, no matter how crudely expressed, which was so characteristic of the early times, was lost; heraldry, portraiture, scenes from the life of the donor became prevalent, as one of our illustrations shows. The incident from the scriptures which served as an excuse for placing an exploitation of the donor's vanities in a church was relegated to a small unimportant section. All this with a clever, not to say brilliant, misuse of the material. Even in the Jesse-Tree windows which in a genealogy loving time were to demonstrate the descent of Christ from Jesse, the father of David, donors were fond of having their portraits inserted among the ancestors. And this was not as late as the seventeenth century, in this later period the work became thoroughly flamboyant.

The art, if it could still be called such, struggled on in a feeble way until men like Burne-Jones and Morris appeared on the scene, who if they did not improve methods to any great extent at least dignified it with a spiritual quality of design.

It was not until we began to emerge from our artistic dark ages, say about the time of the Centennial Exposition—perhaps a little later—that several of our artists became interested in the possibilities of glass. It was the period known as the American Renaissance; a band of young enthusiasts had returned from their studies in Europe, and, finding the Academy intolerant of new ideas, founded the then virile association, The Society of American Artists. But these were mostly painters of pictures and only passively interested in the decorative arts. Somewhat apart from these, however, there was a small group to whom decoration was a fine art of the first order, foremost among them being John La Farge, a born colorist, a deep thinker but far ahead of his time; Francis Lathrop, fresh from the influence of Ro-

setti and Morris, F. D. Millet, Maitland Armstrong, and Louis C. Tiffany, the latter imaginative, with strong decorative color but with more or less of a tendency toward the exotic and oriental.

William Morris Hunt had completed his decorations for the Albany Capitol but never became interested in glass, so far as I know. Besides these, architects like Richardson, Hunt, and Post, with their artistic natures and strong personalities, were naturally interested. Such



FROM THE ABBEY OF JARCY.
(Twelfth or Thirteenth Century.)
Aside from the primitive drawing the lead was used very intelligently.

a group in such a time could not be ignored, and, to come back to our subject of glass, experiments were soon under way to better conditions which were then at their worst.

La Farge realized perhaps more than anyone else that glass was the medium *par excellence* for color, no pigment on canvas rivalling it; also that, as the stained and painted window of that time, made of the commercial pot metal or "cathedral" glass, was poor, thin and garish, also exceedingly formal and

"shoppy," a more synthetic quality and a greater joyousness of color might be achieved. He made a few small windows with such material as he could secure, using slabs of onyx and alabaster where the available glass would not do; all this with rare artistic skill; but he realized that if glass was to regain the importance of the mediaeval period and be suitable to modern conditions the old relation between artist and artisan had to be re-established, and then we had to go back to first principles and make our own glass. A series of experiments was entered into which led to the making of splendid pot metal, also the invention of what is now known as opalescent glass; the advantages claimed for the latter being these: a greater fire and richness, a greater depth where necessary, with flashes of brilliancy, a flowing together of pure color tints *in* the glass instead of pigment *on* the glass; great beauty in the semi-transparent whites and a consequent range of mellow light tints never

achieved before. But it was soon perceived that this was essentially an artist's medium; as the flow of color and the blending of tints could not be absolutely controlled in the molten state, rare artistic judgment had to be used in its selection. When unskillfully used, the result was apt to be as distressing as it was otherwise beautiful, and the fact that the medium has largely passed out of the hands of the artist to-day and is brutalized for gain is responsible for the more or less discredited name it is given in some quarters. Our artists did not stop with the development of a greater color orchestration; as they had started from first principles in the making of their glass, they did the same in regard to lead lines. The early artists did not consider these an evil but a distinct asset in giving vigor to their forms; in the later historic period the lead line was avoided as much as possible, pigment and stain being relied on mostly for form. But the modern European window makers sinned even more; besides using the lead sparingly as outline, they made a point of using it directly across forms; this, I am told, is to give the window a knowing and antique flavor. We never find this done in the best old work for its own sake; either their pieces of glass were not large enough or, being broken, had to be patched that way. The lead map of even a Burne-Jones window with all its spirituality of conception has the appearance of irregularly laid stone work. Our men, therefore, decided to use the lead intelligently, defining and accentuating form. The liberal use of it became a necessity in an art in which so little use was made of applied pigment; its use in the separation of lights, half-tones and shadows giving a crispness and carrying power which no amount of painted folds or stencilled pattern can ever have. To use a lead in this wise meant study, however; line must meet line, and a drawing must be made with the exigencies of glass always in view. In light windows in which the lead shows more than in the deeper toned, a most careful lead drawing is in order; so that even were the window made in clear glass the arrangement would be handsome. Of course all this is troublesome and costly, but is it not worth while?—the result being infinitely more handsome and decorative than the painted window. The futility of trying to achieve a deep, rich, and chromatic quality in the painted method is best exemplified in St. Bartholomew's Church, New York; the pigment here has been applied very heavily and pattern scratched into it with the idea of producing vibrating shafts of light. The net result of these windows, however, is a heavy, hot muddiness of color, lacking translucency and making the church dark as night.

The English author, Mr. Lewis F. Day, who, in his excellent treatise on historic glass deplores the lavish use of painting and urges a return to sound conditions, has this to say:

"The astonishing skill of the later pictorial glass painters goes only to prove the futility of their endeavor. What the brothers Crabeth of Gouda and Linard Gontier of Troyes could not do, glass painters may well despair of doing. It is in the nature of things that color *upon* the surface of glass cannot have the limpid depth and luminosity of color suspended, as it were, *in* the glass itself, and that to deepen the color of the glass by painting upon it is to dull it. Enamel color (called pigment in this article) is by comparison with pot metal poor, thin and garish. Painted shadow is heavy, lacking at once the translucency of glass and the transparency of shadow, for its depth is only obtained by the density of the opaque pigment used."

But, more than all this, it is recognized that besides technical excellence, a window, to hold its high place as a fine and decorative art must rise above the hackneyed and stereotype sort of thing in vogue both as to conception and design; furthermore, the position and surroundings of the work must be carefully considered; to place a thin and glaring window facing a congregation, as sometimes happens, is nothing short of a crime against their eyesight, not to mention aesthetic considerations. This seems so obvious, and yet this mistake is made time and again.

In mediaeval days, when few people



WINDOW OF KING ST. LOUIS, CHURCH OF SAINT-SAENS. (FIFTEENTH CENTURY.)
Not the slightest attention was paid to uniformity of scale of the figures, the main object being to achieve a decorative effect.



FROM THE ABBEY OF JARCY.

Twelfth or Early Thirteenth Century. Strong and ingenious lead design, against a light background, giving a maximum of light without sacrificing color.

could read or write, the church window was a sort of Bible Primer depicting not one but many incidents from the Scriptures or the lives of the saints. It is to the infinite credit of the artists of those days that they could weave these themes into a rich and agreeable pattern. In our day and generation the singleness of theme is preferred, excepting in large spaces. Besides this, when we enter a church, leaving the world with its thousand distractions behind, we prefer to enter a sphere where restfulness instead of glitter prevails; where the windows are reverential works of art, beautiful and harmonious in color, leading us on to contemplation and where mere prettiness, sham and triviality do not exist, nor where fads, or affected archaicisms flourish. (I mention the latter, because an architect seriously told me that the only way to draw figures for glass was in the Byzantine manner, stiff and rigid, with toes pointing down and attenuated limbs.) Although we have suffered greatly from the infliction of the factory product, both domestic and imported, so many excellent works have been created by American artists that we cannot here enumerate them. To mention only a few who have been identified for some time with the medium: At the time Mr. La Farge was constructing the Battle Window and executing the decorations of the Cornelius Vanderbilt house (1883) there were with him a corps of young men; as I remember them they were Theodore Robinson, Will H. Low, John Humphreys Johnston, Sidney Smith, Roger Riordan, W. B. Van Ingen, George Rose, and the writer. F. D. Millet and Francis Lathrop had previously been associated with him in the decoration of Trinity Church, Boston. In another group were Louis C. Tiffany, Maitland Armstrong, Samuel Coleman, Lockwood de Forest, and F. D. Millet. According to the last named gentleman the two windows which he made for Harvard Memorial Hall, one for Mr. Joseph H. Choate, were produced about this time, and, as Mr. Tiffany expressed the idea that a window could be made without painting, Mr. Millet made the first two "Mosaic" windows for Mr. Tiffany to be placed in a church in Lynn, thus setting up the first glass easel in the latter's atelier. Nearly all of these men worked individually later. Besides these, moreover, nearly all the artists who have essayed mural painting have worked in this medium some time or other; more as a labor of love, I should say, because, compared with painting, it is a decidedly underpaid art. All in all, a group of men and women, who, if their interest could be maintained and, acting in concert, would exercise a strong influence. While they have neglected this, thus forming no American school, and have permitted representatives of business interests to speak in behalf of the art publicly, they have at least avoided mannerisms, and that is more than can be said of the English school of to-day. I have seen a great number of English glass cartoons from different establishments, and they all look alike to me. The men have all been trained to do a certain thing a certain way. The same turn of the wrist, the same treatment of drapery, of foliage, of interpretation of Gothic ornament, very prettily done, very clever, but rarely suggestive of color. Even the work of as talented a man as Holiday shows that influence; the multiplicity of pretty little detail suggesting clever brush work in enamel painting, and not *glass,* thus detracting from the bigness the work might otherwise have.

Is this then the manner of doing things which our friends call "ecclesiastic"? Surely, religious feeling is not confined to England and the Continent; as our churches are bravely meeting the problems facing our modern civilization, shall the artist alone be a reactionary, denying all progress, and be content to follow the art of a period no longer virile instead of making the *experience* of the best mediaeval workers his own and expressing himself as a man of to-day?

As the American artist is striving to see things in a big way, insisting more on the essentials than on things unimportant, and duly mindful of the relation of his work to the structure, shall that count against him? There are some people so curiously constituted, to whom any figure

which has human interest, which looks as though it had life, seems very unchurchly. In very many cases, formalism and symbolism spell only bad art. We have all seen perfectly atrocious things pass muster with church authorities because certain standard symbols were correct and the artist's limitations passed for profundity and close and intimate love and understanding of the primitives.

I do not wish to be misunderstood though as advocating license instead of breadth of design; very serious mistakes have been made in ignoring all the conditions of the structure, even going so far as to remove mullions from a perpendicular Gothic window in order to permit a lateral or a sprawling composition.

In the last few years a number of painted church windows have been made in this country; those made by business houses were more or less in the English manner,—light and glittering. The individual artists who essayed this manner whether conciously or unconsciously, achieved a fuller chromatic chord something like the better American window, lacking however its limpidity of color.

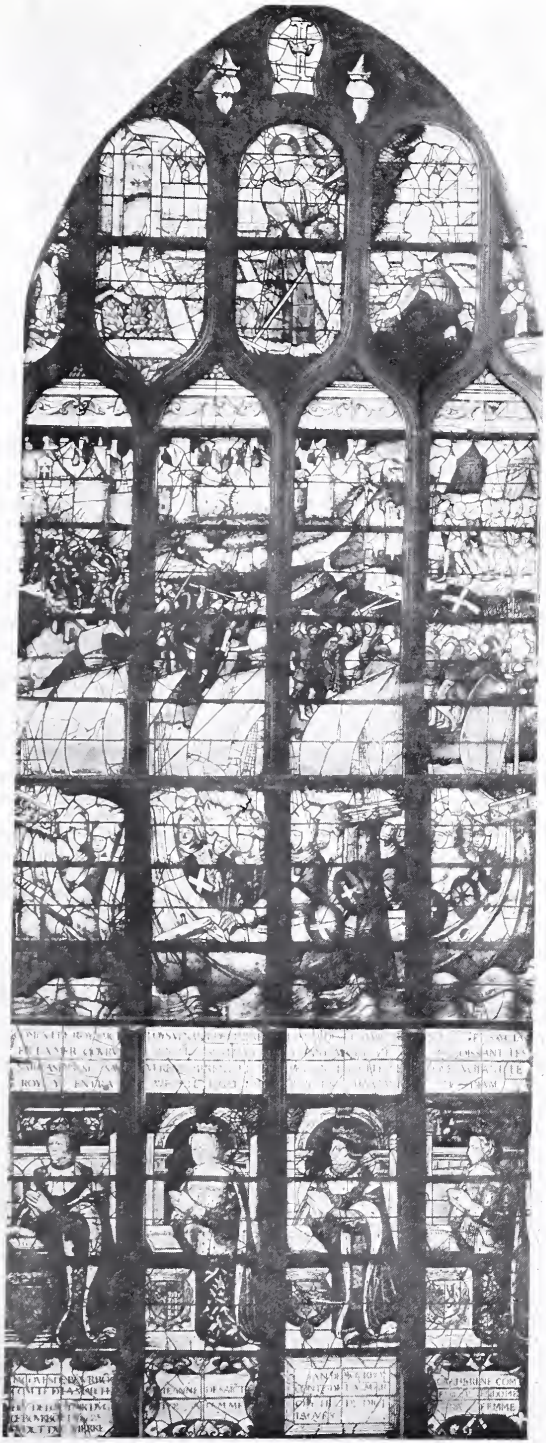


ENGLISH WINDOW.
By Selwyn Image.
Note the Block-Like Leading of Drapery, Etc.

One very serious objection to opal glass has been made by architects and artists alike, which must be noted. Many an architect, not being conversant with the technique of glass, has found to his distress that the outside appearance of some windows clashed considerably with the color of his structure and has therefore condemned opal glass in toto. A word as to technique is needed here. . In the construction of a window it is often necessary to "plate," that is, to overlay the already cut and leaded window with another glass in the same manner as a painter glazes a picture, to secure greater harmony. Sometimes the mistake is made of plating on the outside of the window, and as this "plating" is usually in fairly large pieces, and opal glass has an entirely different appearance with the light falling on it than when it is seen by transmitted light, it stands to reason that if such outside plating is used without reference to the color of the building, it is a grave mistake. I have yet to see a richly cut and leaded window in which the necessarily larger pieces, such as backgrounds, were used



JESSIE TREE WINDOW.
From Cathedral of Antun.
(Sixteenth Century.)
The figures of the ancestors are probably portraits of the donors.



CHAMPIGNY-SUR-VEUDE.
(Sixteenth Century.)
Christ appearing to Magdeline (upper lights)
Battle scene and portraits (lower lights)



ENGLISH—THE BLOCK-LIKE TREATMENT OF THE RECEDING WATERS SUGGESTING A SUBWAY.

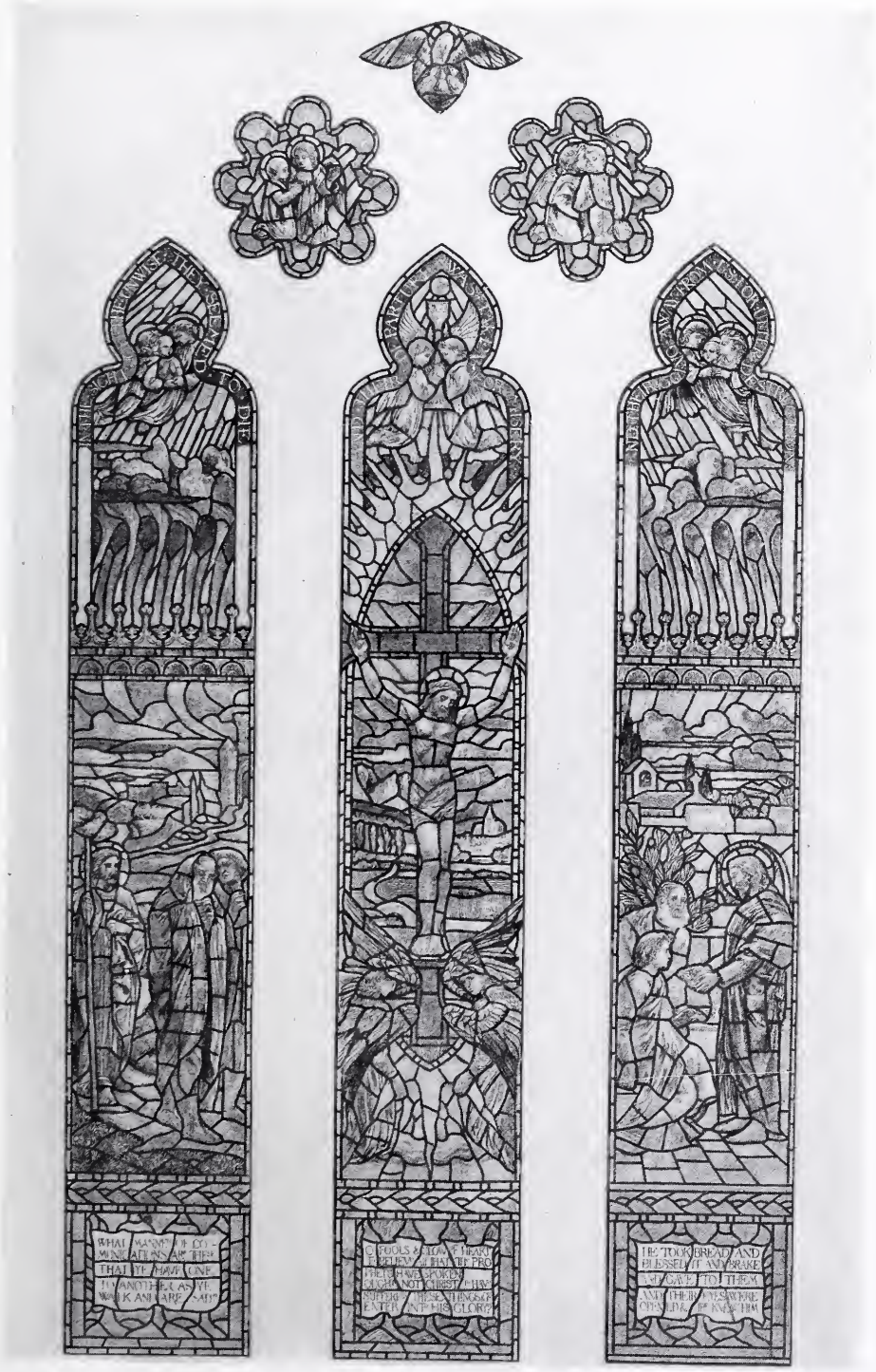
with any degree of judgment and which had no outside plating, look badly from the street. As quantities of opal glass are now exported to European makers to be used chiefly for exterior "plating" to give their painted windows more body, the same objection will hold in regard to these.

If one may generalize, the broad distinction between modern European work and ours, leaving out the question of conception and design seems to be this: The former, as a rule, has abundance of painted detail, of which a profusion is necessary to give life to the evenly colored glass; it is good and academic in drawing, but lacking in tone and is apt to look thin and spotty at a distance. The American artist is less academic in drawing but more individual, striving for deeper, fuller color harmonies and tonality. Such work never goes to pieces at a distance, but is improved thereby.

There is always a demand for figure windows of a low cost. This is deplorable, but as long as it continues to exist, the painted one is to be preferred in such case, as even the ordinary trade opalescent window is more costly than the other. A superficial result and a mass of detail are much easier to achieve in the painted method, and less offensive than a cheaply made, inartistic opal glass window; the latter medium seeming to rebel against unskillful use. Owing to the fact that workmen and artisans are necessary factors in the construction of a window, it has with many come to be looked upon as an article of manufacture, with the result that the artist has to a large extent been eliminated, and, where unavoidable, been employed by the maker; in that case, however, rarely consulted in the construction of the work. For the best interests of the art, conditions should have been exactly reversed.



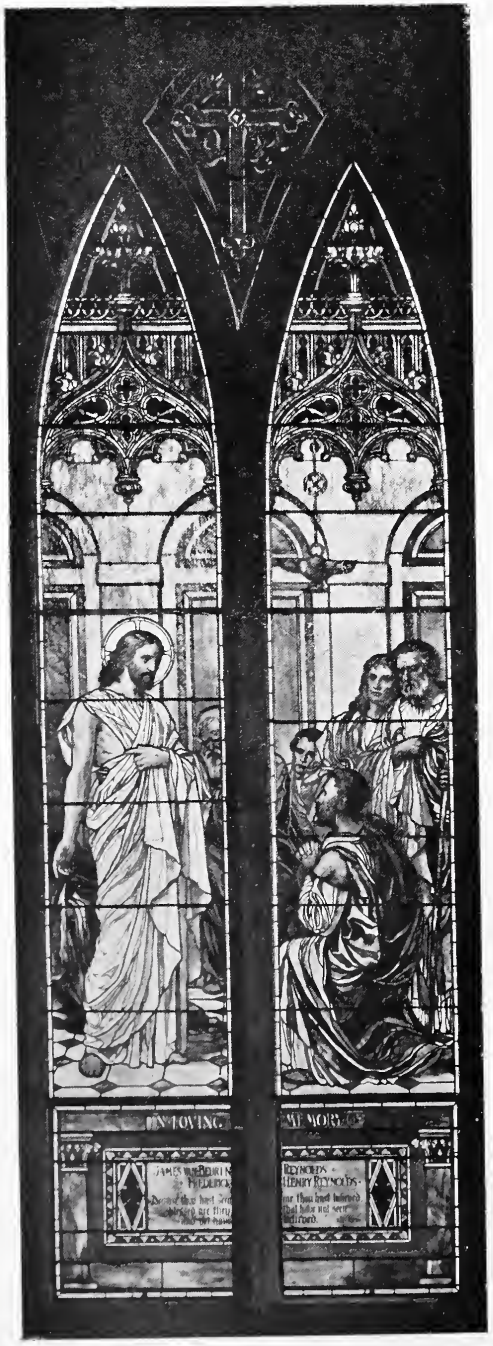
CENTRAL PANEL OF CHANCEL WINDOW DESIGNED BY FRANCIS LATHROP.



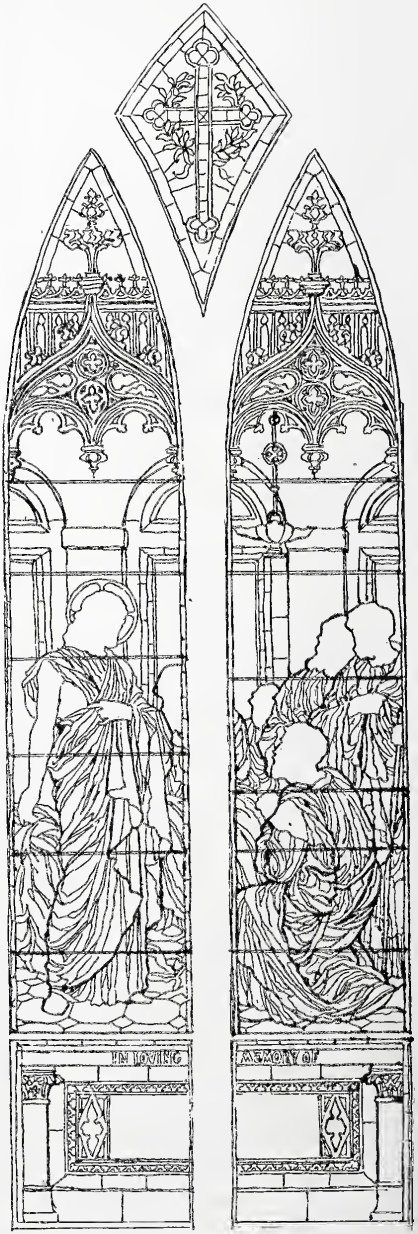
ENGLISH WINDOW IN CEMETERY CHAPEL, DORCHESTER. BY CHRISTOPHER W. WHALL.

Most artists here have learned that it is as important for them to thoroughly supervise and take an active part in the construction of a window, from first to last, as it is to apply their touch to a canvas personally.

About two years ago the writer put this question to Mr. La Farge: "Recently I have stated that although our art in glass is only some thirty years young, it



WINDOW IN CHURCH OF THE ASCENSION, NEW YORK CITY.
By the author, showing the American manner of designing leads.



"LEADING" PLAN FOR WINDOW IN CHURCH OF THE ASCENSION, N. Y. C.
By the author.

is already on the verge of decadence owing the meretricious methods which have invaded it. Do you agree with me in that?" "Quite so," he replied, "but there is hope; it lies in the enlightenment of our public; they will learn that every work of art in its final analysis depends on the personal equation."

In most of the European establishments the methods to-day have become stereotyped and mannered; they are precisely the same which they followed in the middle of the last century. Ask either Mr. Calvin or Wright, who will tell you that there the highest priced man is the one who makes the sketch on which the order is secured. Another makes the cartoon, another the tracings, another cuts the glass, and different men paint the flesh, lay the mat for shading, paint the filials and crockets, and so on, each man to his own essential part. Of course a man painting only filials and crockets ought to do them very well, but when all this is put together, is it art? Even Burne-Jones submitted to this dead-levelling process. On my last visit to him I said: "Our countrymen, Sir Edward, have always taken the greatest interest in your work and admired it, only your glass, it seems to me, has a somewhat commercial appearance." Burne-Jones replied: "I have been dimly aware of that, but can't account for it; have never been quite satisfied with the appearance of my windows." "I am aware of the great demands on your time, I went on, and suppose, therefore, that you turn your drawing over to your friend, the window maker, and trust to his skill. Has it ever occurred to you to go to the glass shop yourself and superintend the whole thing, arranging your lead lines, do your own painting if necessary, selecting your own glass, and, going further, have glass to suit your own purposes made? Your windows would then have the same individual character which your paintings have." "No, I have never thought of that; perhaps you are right," he replied.

In conclusion I will add that while efforts of American artists in this direction are being appreciated in Europe, our own country is slow to give it official recognition. Up to date our otherwise wonderfully well equipped Metropolitan Museum has no masterpiece in glass by any American artist. It has a rather bad example of mediaeval glass and some modern French by Merson, which latter must be regarded as an object lesson of what glass should *not* be: while precise and academic in drawing, it is as thin and uninteresting as a weakly colored drawing on tissue paper. Fortunately, the Worcester Museum has acquired La Farge's beautiful "peacock window." But the people's museums, where this masters work will have to be seen are churches like Trinity in Boston and Ascension Church in New York; they cannot help but impress one deeply.

Very distinguished work has also been made by others; take it all in all, a high standard has been set and our artists have abundantly proven that they can design in a dignified manner befitting a house of worship, can work in either medium, preferring on the whole, however, the American method and glass, regarding the latter as a distinct contribution to the art.

Far from feeling hopeless, I am sure there is a great future for the art so splendidly begun; and provided that the artists themselves do not lose heart and hope, it will come through the appreciation by the public of these facts: That every window of the best periods in the great cathedrals was intended as a work of art and is original, not a thing rehashed again and again; that it was conceived in the spirit of its time; that each was considered for its particular purpose, place, and medium and that individual responsibility as well as credit should attach to a window as well as to a painting.

As Goethe says of us:

"Amerika, du hast es besser
Als Unser Continent, das alte,
Hast keine verfallene Schlösser
Und keine Basalte.
Dich stört nicht im Innern
Zu lebendiger Zeit
Unnützes Erinnern
Und vergeblicher Streit."

We may regard this as an omen for the free development of a beautiful art.



CENTER CHURCH, NEW HAVEN, CONN

EARLY AMERICAN CHVRCHES

PART III



NORTH & CENTER CHVRCHES IN NEW HAVEN, CONN.~ CHRIST CHVRCH & POHICK MEETING HOVSE NEAR ALEXANDRIA, VA.



BY AYMAR EMBVRY II

THE MOST DELIGHTFUL FEATURE of New Haven is the green with the three old churches which form a beautiful composition and curiously enough the Gothic Episcopal Church was built at the same time as its two Classic Puritan brothers and was designed by the architect of one of them. The congregation of Center Church was the oldest of the three, and the building was the fourth to be erected on the site where in 1640 the first settlers built for their leader and minister, John Devenport, the first meeting house. The present church, together with North Church and Trinity Church was built during the war of 1812 and finished in 1814 or 1815. The architect of the Center Church was Ithiel Towne, and of the other two, David Hoadly. I have been fortunate enough to discover rather more regarding the architects of these two churches than I have been able to do of the others, chiefly through the courtesy of one of Mr. Hoadly's descendants, himself an architect, and a few words about them may be of interest. Ithiel Towne, who designed Center Church, was the first architect resident in New Haven; he came there, I believe, from Hartford in 1810 and died there in 1844. Among his other prominent buildings were the Old State House on the green, the Salisbury House on State Street, Christ Church in Hartford, and the Merchants' Exchange in New York, afterwards used as the Custom House; this was not the well-known building on Wall Street now occupied by the National City Bank, but its predecessor. In his design for the Center Church he is supposed to have followed St. Martin's-in-the-Fields in London, built in 1726 by James Gibbs, but Center Church shows a number of variations from the design of its prototype, and in general these variations have improved the building. James Gibbs' church was built entirely of stone, while the tower, cornice, etc., of the Center Church were of wood, permitting lighter and more graceful proportions. Unfortunately, in 1845 the red brick of the structure and the white woodwork of the cornice and ornamental parts were painted a dull lead color, destroying most of the effect. At this time also the interior of the church was quite extensively remodeled, a low dome was introduced and possibly the reredos added. The framing of the steeple is a very ingenious one, each story thereof being an independent structure from the one below and continued down to the brick tower.

David Hoadly, the architect of North Church and Center Church, was born in 1774 at Waterbury, Conn. His architecture was self-taught or gathered from practical experience, either with the architects or contractors (who possibly combined both qualities) of the Congregational Meeting House at Waterbury, built in 1792, and at Milford and Norfolk, Conn. In 1814 he moved with his family to New Haven, built the North Congregational Church, Trinity Church and the Tontine Hotel, the Sargent house and other houses at New Haven, and was either the architect or assisted the architect of the Old State House (now the City Hall) at Hartford. He died in July, 1839. While the following does not concern the North

Church, it may be of interest to architects and antiquarians. When the Sargent house was torn down not a very great while ago to make room for the new New Haven Library, the following inscription was found on a tablet in the foundation walls: "I have caused this beautiful building to be erected for your use as well as for mine, & have taken much pains to accommodate you for which you will never pay, & being no relative of mine I demand that you assemble your friends together on every 26th day of May in honor of the independence of South America, it being on that day in the year 1810 that the inhabitants of Buenos Ayres established a free government.

"David Hoadly, Architect
"L. Butler, Mason
"D. Ritter, Script."

It may be said in explanation of this curious inscription that Mr. Sargent was a good friend of Mr. Hoadly and had been the American Consul-General at Buenos Ayres when the Revolution occurred, and the inscription is indicative of the very general interest taken in the United States in the rebellion against Spanish rule in South America and their rejoicing over its successor. It is also interesting to note that Hoadly signed himself "architect," although it is probable that his function, as in the case of many of the other early American architects, included at least some of the duties now the contractor's, and that he was very truly an architect in feeling as well as ability is indicated by his feeling that the interest and love an architect puts in his works, the "pains," as he calls it, cannot be repaid by mere money but only by appreciation. The building of these three churches was difficult, since the lumber for them was obtained largely from the Connecticut River, down which it was floated in rafts and was then transported by boat to New Haven. As this was in war time and there was a very strict blockade of the Sound points, the progress of the buildings was considerably impeded, so much so in fact that the work at one time was stopped altogether. The architect, Mr. Hoadly, applied to the Governor of Connecticut requesting him to communicate with the Commander of His Majesty's fleet to permit the free transportation of the materials for these churches. The following letter, addressed to Mr. John Kingsbury of Waterbury from his brother, at this time Secretary of the State of Connecticut, will be of interest:

New London, Conn., 19th July, 1814.
Dear Brother:

Your letter by Mr. Hoadley of Waterbury I received, since which a flag has been sent on board of one of His Majesty's ships, and I have this day received an answer by a Flag from his Majesty's Ship Superb, with an open letter, addressed to his Excellency John Cotton Smith, which I shall forward to him immediately by mail. The contents of the open letter are as follows: "In compliance to your request in favor of the Wardens and Vestrymen of Trinity Church in New Haven, the Ships under my orders will be directed not to molest any vessels that on examination prove to be literally engaged in conveying from the Connecticut the materials in question to New Haven for the purposes of erecting a Church."

It will be most proper in my opinion for Mr. Hoadley to wait on his Excellency Governor Smith and receive from him a certified copy of the permit from Captain Paget. Give my love to your children and accept of this from your friend and brother

Jacob Kingsbury.

"John Kingsbury, Esq."
Waterbury.

The blockading fleet, by the way, was in command of Commodore Hardy, the same Hardy who received Nelson's dying words.

North Church at the present time is the more striking in appearance of the two buildings, although its spire was purposely made lower than that of the Center Church in order that the three might compose together with the Center Church the dominant mass, as befitted its age and importance in the history of the settlement. The North Church is at the present time painted a lively and agreeable combination of buff and white, and the tower of this church, as well as



CENTER CHURCH, NEW HAVEN, CONN.



NORTH CHURCH (UNITED)
NEW HAVEN, CONN.



NORTH CHURCH (UNITED)
NEW HAVEN, CONN.

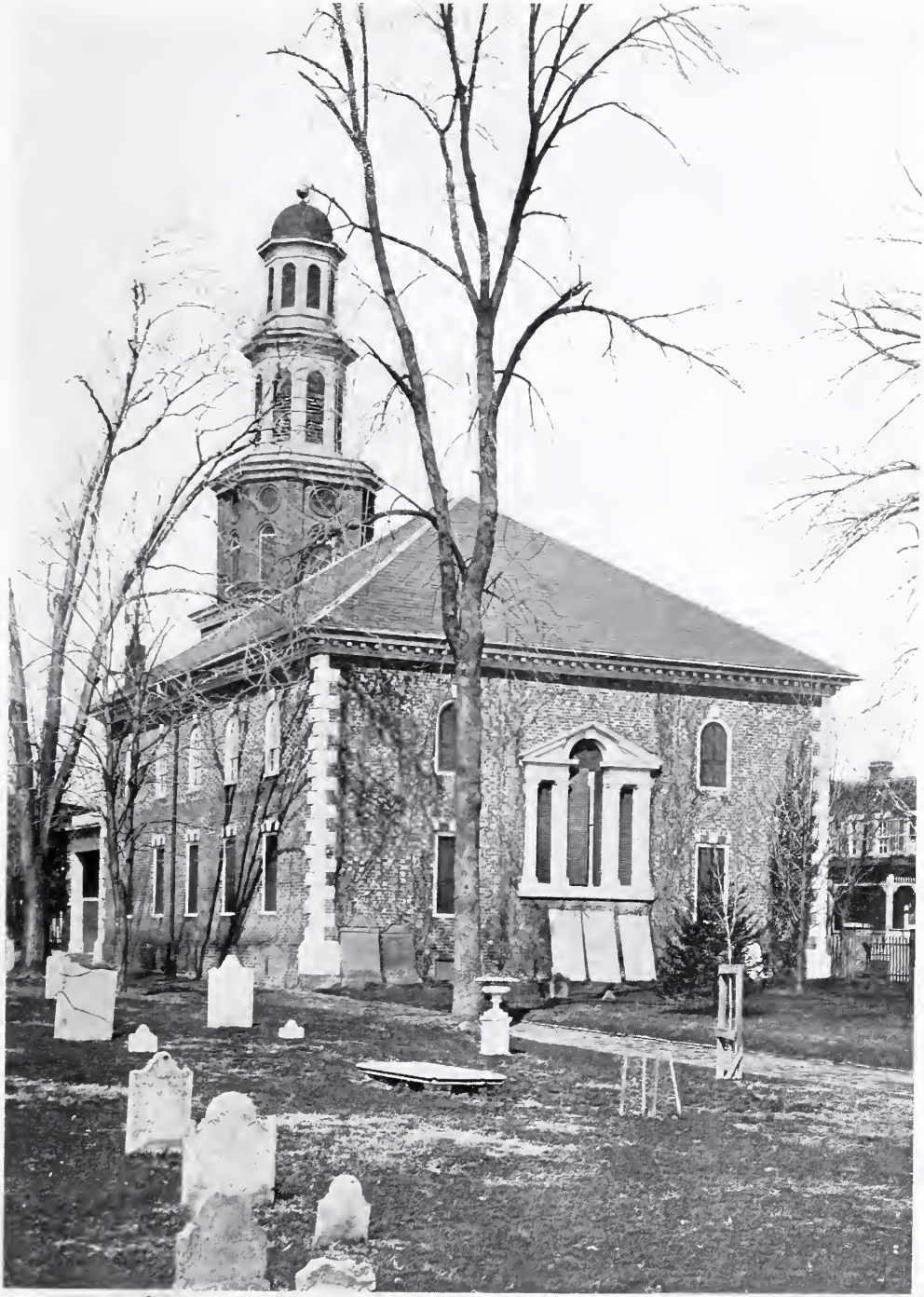
in the Center Church, is plainly marked as starting from the ground and not resting on the pediment. The interiors of the two churches are in motive a good deal alike; each has a flat dome, possibly not part of the original design, and the motives around the pulpit are similar in both churches, although that in the North Church is apsidal, while in the Center Church it is applied against a flat wall. These churches have been as a whole, both in exterior and interior, very slightly changed since their construction and remain immensely interesting and instructive examples of early American architecture.

CHRIST CHURCH, ALEXANDRIA
AND
POHICK CHURCH,

Near Alexandria, Virginia

THESE TWO CHURCHES resemble each other in appearance, were built near together and at about the same date. Their associations therefore are much alike, and their history touches perhaps the lives of more great men intimately than does that of any other church in America. The original parish in which both these churches stand was the parish of Truro, and the Pohick congregation was the original one in that part of the parish and was the parish church of the Mt. Vernon household, the first of the Washingtons intimately connected with the church being Augustine, and it was he who nominated the first lay leader. From that time on the family took a prominent part in the church; on the 25th of October, 1752, George Washington and George William Fairfax were appointed church wardens for the ensuing year. The original church structure was a frame one, erected before 1732; but this became inadequate, and in October, 1764, Truro parish was divided between the Pohick church and the congregation now known as Christ Church, Alexandria, George Washington becoming a vestry man in both parishes. One question which has vexed the ecclesiastical antiquaries is settled by the accounts of Pohick Church, and this is as to whether surplices were or were not worn in pre-Revolutionary days; the accounts of Pohick church show that surplices were bought in 1756.

Alexandria was at that day quite a prosperous little town, and in 1765, after the division of the parish, it was determined to build a new church, or rather two churches, one at Falls Church and the other at Alexandria. The architect selected was one James Wren, reputed to be a descendant of Sir Christopher Wren, and the contract was given to James Parsons, a builder, in the sum of six hundred pounds sterling. The church was built of brick and roofed with juniper shingles, the order used in the decoration of the pulpit and tables for the Commandments and the Creed being Ionic, from which apparently the volutes have now been lost; the remainder of the building is supposed to have been designed in the Tuscan style. The gallery in the interior was added about 1800 and the spire somewhat later, the actual date not being known to me, the original appearance of the church being practically that of the Pohick church. It seems that even in those days contractors were not without their difficulties, for the building in 1772 was not completed and the original contractor declined to proceed with the work. Colonel John Carlisle then agreed to complete the work for the additional amount of two hundred and twenty pounds, and the church was finished and dedicated on February 27, 1773. The pews were then sold to the members of the church, George Washington paying thirty-six pounds ten shillings for his, which, by the way, remains the only pew in the church in its original condition, the other old square pews having been cut up into



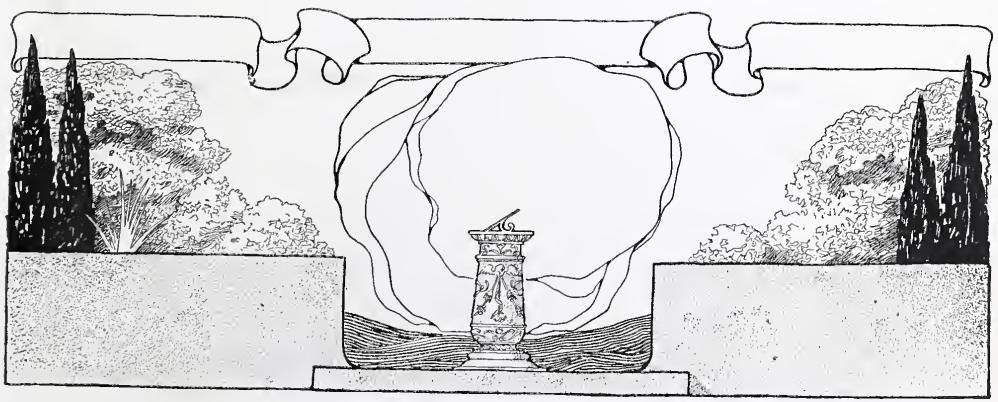
CHRIST CHURCH, ALEXANDRIA, VA.



INTERIOR OF CHRIST CHURCH,
ALEXANDRIA, VIRGINIA.

the present day or "slip" type. The present building of Pohick Church was started four years after the Alexandria Church and completed at about the same date. At the time of the building of this new church there was some discussion as to whether the old site should be reoccupied, or whether a new site should be chosen. Many people wished to preserve the old site, especially since it was surrounded by a churchyard in which the dead of the parish had been for long buried. When this discussion arose, Washington at once made a survey of the parish and made a map, marking thereon the residences of the parishioners; the church was accordingly placed at the centre of population. The construction of the new church was placed in the hands of a building committee of five, which contains some very distinguished names: George Washington, George William Fairfax, Daniel McCarty and Edward Payne. The wily Mr. Washington saved the architect's commission by making the drawings himself, and it is reported they were drawn on white paper with india ink; tracing cloth was, of course, in those days unknown. This building, although somewhat smaller than the Alexandria Church, was of very similar design, and it is probable that Washington as a vestryman of both churches had access to the plans of Christ Church and copied them with the necessary reductions in size. The contractor was one Daniel French, whose contract was for the amount of 887 pounds. The specifications were known as "terms of agreement," and the contractor was then known as the "undertaker." Possibly, terms of disagreement might better define specifications, although the contractor's former title might unhappily often be employed to-day with truth.

From the time of completion the history of the two churches was sadly unlike; Christ Church continued to grow in wealth and in physical condition, while Pohick Church was much neglected and in 1837 was in a very bad state of repair. During the Civil War "the military invaders carried off at their pleasure any of its interior woodwork for private purposes," and all that remained of the original woodwork at the close of the Civil War was the cornice around the ceiling. From the conclusion of the Civil War until 1874 no services were held there, but at the latter date a wealthy New Yorker collected sufficient money from New York and Philadelphia to put the church in good condition, although no true restoration was attempted. Beside the Revolutionary worthies who attended these two churches were many of the prominent Southerners who figured in the great War of the Rebellion and were members of the parish, among them that great leader whose career, except as to its success, was so singularly like that of Washington: General Robert E. Lee.

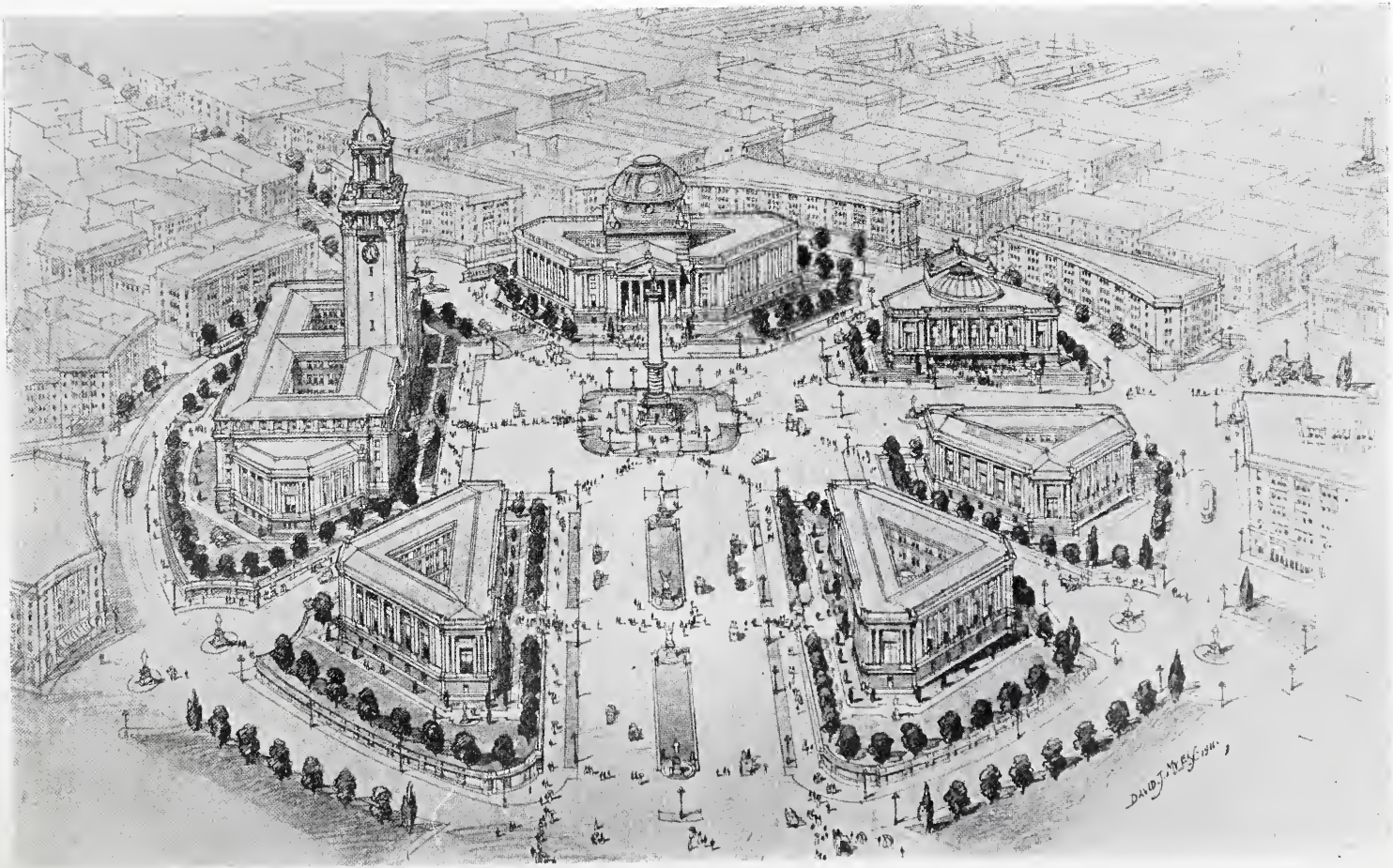




INTERIOR OF POHICK MEETING HOUSE NEAR ALEXANDRIA, VIRGINIA.



POHICK MEETING HOUSE,
NEAR ALEXANDRIA, VA.



CIVIC CENTER GROUP, LOOKING SOUTH
ON CENTRAL AVENUE, SEATTLE, WASH.

PLANNING FOR SEATTLE'S FUTURE



A REVIEW OF THE REPORT

BY

CHAS. MULFORD ROBINSON



LATE IN THE AUTUMN of 1911 there appeared, in the Plan of Seattle, one of the most thoroughgoing and elaborately issued studies of municipal development which has yet been published in the United States. Perhaps in some respects it meets the ideals of true city planning more nearly than does any other. When it is added that the active interest of the Washington State Chapter of the A. I. A. furnished the initial steps leading to the making of this study, there appears its further and special claim to the interest of architects. Finally, in spite of an extraordinary amount of unpaid local work, the preparation of the report involved an actual money expenditure of $50,000—an amount which puts it in a class in which, to date, are only, perhaps, Mr. Burnham's elaborate "Plan of Chicago," the Washington plans, and the still incomplete studies for Pittsburgh. Clearly the Plan of Seattle invites attention.

As one goes through the report, one is impressed by two distinct aspects of it. One is the answer to the question, how, on the initiative of architects, Seattle was able to secure a study of such magnitude, made not by architects or even by local men, but by an outside civil engineer—for the report is the work of Virgil C. Bogue. The other is the report itself—its recommendations and conclusions, and where its main emphasis is laid. Of the two aspects, that which is of most general significance and appeal is the story of how the report was obtained. We shall take that up first, as also is chronologically fitting.

While the desirability of a City Plan had been urged by certain individuals in public addresses prior to 1909, no tangible steps were taken until, early in that year, the local chapter of the American Institute of Architects effected a meeting of representatives from the various improvement clubs and commercial organizations in Seattle. At that meeting the Municipal Plans League was organized. The exposition caused a considerable interruption in the League's activities during the Summer; but in the Fall a committee, representing the League, the Chamber of Commerce, the Commercial Club and the chapter of architects, prepared an amendment to the city charter designed to create and finance a Municipal Plans Commission. This was presented to the voters at the regular election, March 8, 1910, and became a law by the largest majority ever cast for an amendment to the charter of the city.

The Commission as thus created was charged with the duty of procuring "plans for the arrangement of the city with a view to such expansion as may meet probable future demands." The expected nature of these demands was then specifically indicated. The Commission was to consist of twenty-one citizens of Seattle. Three should be members of the City Council, elected by that body; one, a member of the Board of Public Works, elected by its members; one, a County Commissioner; one, a member of the Board of Education; and one, a Park Commissioner, each elected by his confreres. The rest of the members were to be appointed by the mayor, from nominations made from their own number by a long list of organizations and interests. It was required that all

members should serve without pay and that absence from meetings for a period of more than thirty days without excuse should mean forfeiture of office. The Commission was authorized to employ from one to three city planning experts and was to be furnished suitable quarters and engineering and clerical assistance. To finance it, there was created a "Municipal Plans Commission Fund," which should be the proceeds of a tax levy of one-quarter of a mill in the year 1910. Expenses must not exceed the proceeds of the levy and were to cease entirely after September 30, 1911.

Following the election, the appointments were duly made; the Commission met and organized, and thereafter held regular meetings every other week, besides a large number of special meetings. At many of these, delegations were received for the discussion of particular aspects or phases of the work and on some occasions so much interest was manifested that the larger halls of the Chamber of Commerce or of the Commercial Club had to be used. Thus the plans were not the result of star chamber conferences, but every citizen had a chance to bring forward his pet ideas and plead for them. This fact undoubtedly added greatly to the public confidence in the plans and to the popular interest in them.

Very soon after the appointment of the Commission, it selected Virgil C. Bogue as the expert upon whom would be placed the responsibility for the drawing of the plans. Mr. Bogue had built the most difficult portions of the Northern Pacific Railroad, the mountain sections of the Trans-Andean Railway in Peru; had been retained in a consulting capacity on various projects in Mexico, New Zealand, Alaska and several other countries; had been chief engineer for some years of the Union Pacific Railroad, and had had considerable municipal experience as consulting engineer to Mayor Strong of New York. He had also been retained in waterfront work in Tacoma and Seattle. Thus his attainments were well known locally, and at the same time were such as to justify much faith in his ability. He arrived in Seattle in September, 1910, and with just a year for his work, operations were immediately commenced, and every facility was put at his disposal. The Commission's financial statement shows that, aside from the retainer and expenses of the expert, some twenty-four thousand dollars were expended for the engineering force alone during the next twelve months. This is of interest as illustrating the thoroughness with which the work was undertaken.

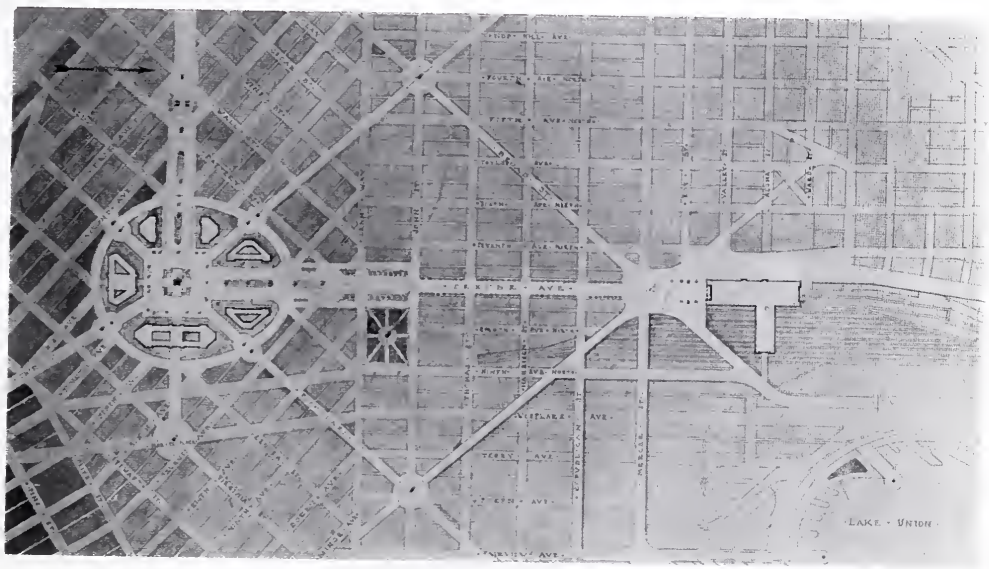
Now, with regard to the plans themselves: It was resolved, after considerable debate, that the plan should embrace an area of about 150 square miles, which, at the average density of population in such American cities as might be fairly compared to Seattle, would provide for a population of slightly over a million inhabitants. This insured a reasonably long look ahead.

After an introductory chapter, which is largely historical, Mr. Bogue discusses his subject under the following heads: Arterial highways, civic centre, park improvements, municipal decorations, harbor improvements, Port of Seattle, future development of the central waterfront, transportation. It will be perceived that the harbor and waterfront receive special emphasis in the Table of Contents, and this becomes more marked as one turns the pages. For, while fourteen pages are allowed to suffice for highways, exclusive of forty in an Appendix, ten for the elaborate civic centre, seven for parks—since these had been pretty fully covered in an earlier report—and six for municipal decorations, the harbor, port and waterfront have a total of seventy pages and sixteen out of the nineteen large maps which are folded at the back of the book. No doubt this predominance of a phase of city planning which has not heretofore had much emphasis in American work was very natural on the part of a man of Mr. Bogue's attainments, with special qualifications to discuss it; very likely its prominence is justified, in Seattle's expectation of becoming a great port; and probably its emphasis is in accord with what had been the wish of the Municipal Plans Commission when it selected Mr.

Bogue to make the studies. But it is so striking a feature of the report—whether the latter be judged by itself or in comparison with others—that no review can fail to speak of it, especially in an architectural journal where the recommendations in this portion of the report invite but little attention.

In platting the highways the conclusion was reached that "the lines of heavy travel in Seattle would, in the main, always be north and south." Though the city's site is exceedingly irregular, careful surveys and study revealed the possibility of laying out arterial streets of convenient location with grades seldom exceeding three per cent. The locating of these streets is undoubtedly one of the most valuable contributions of the Seattle plan. "It was found," says the report, "that the lines of main arterial highways tended to cross or approach each other near Fourth Avenue and Blanchard Street," and it was found, further, that the centre of population was very close to that corner. "The logical outcome of careful study was a decision that the Civic Centre should be placed at Fourth Avenue and Blanchard Street." This is an exceedingly interesting statement, for to many city planners it will seem not at all wise to place the Civic Centre, with the large open space that is a feature of it, at the point which gives promise of being the most congested and, therefore, the most valuable to retail trade in the city.

But in the discussion of the Civic Centre it appears that other influential factors, besides that "logic" of the situation to which reference has just been made, determined its location. Unexpectedly, the "question of economy" proves to have been one. Because of recent regrading, the suggested site is now "without buildings requiring purchase under condemnation proceedings. This eliminates a requirement hardly to be elsewhere escaped. Furthermore, the location is still at the verge of a rapidly expanding business area and is, consequently, obtainable at a comparatively low figure, probably not to exceed, at present valuation, $3,500,000, including the new streets, avenues and plazas immediately connected therewith." Even this figure could be ultimately much reduced, through the sale of the present public building sites. Moreover, it is claimed that as the proposed location is where the stream of business and traffic must inevitably divide, owing to the



PLAN OF CIVIC CENTER PROJECT—SEATTLE, WASHINGTON.

near presence of Lake Union, and the divided streams assume different characters, it would nowhere else be possible, in the probable business area, to obtain "the amount of land necessary to provide for a centre of suitable amplitude on practical grades, without interference with the natural flow of public and private activities." These are certainly very important considerations; but it is interesting to find Mr. Bogue still returning, with abounding confidence, to the "logicalness" of locating the Civic Centre "at a natural conflux of arteries," and "at the natural junction point of a future rapid transit system." It is proper, however, to add the author's promise that such location will help to relieve congestion, and that, from what may be called the scenic standpoint, he believes the site to be all that could be desired. He says:

"By a happy circumstance, the location lies upon a natural eminence, so that by a slight change of grade the land will fall away gradually to the north, south and west, while to the east occurs a more perceptible drop, of approximately fifty feet, to a proposed market-place on Westlake Avenue." The buildings constructed upon it will be "visible from all the environing hills and from the harbor and Puget Sound. To appreciate its full significance, one has but to regard its inspiring possibilities from the surrounding heights or from just beyond the immediate harbor line. * * * Not less impressive would be the view within and from the Centre itself. Detached from structures of more ordinary character by a circumferential thoroughfare, its noble buildings would emphasize the natural and exceptional beauty and dignity of their environments." The details of the plan are not very clearly given in the text; but, briefly, it appears to contemplate an ellipse penetrated by great avenues converging on a central point, where there will be a shaft and monument. In the arcs between these converging avenues the public buildings will be located. One street will be the broad, parked Central Avenue, leading direct and at no great distance to the new Union Station, so that the tower of the latter will close the vista outward from the Centre by this avenue, while the Civic Centre itself will offer an inspiring view as one emerges from the station. Another will be "'Olympic Mall', whose axis pierces the loftiest peak of the Olympic Range. It will serve as approach from the sea and at the shore end will some time be embellished with a monumental water gate." Finally, in lacking a sense of enclosure, the Civic Centre promises an impressive air of spaciousness, though with no great actual area as compared with centres that have been planned for other cities. But that the space will be sufficient is suggested by Mr. Bogue's emphasis on the value of the proposed arrangement in giving distance from which the public buildings may be effectively seen and in his rather novel comment, that a Civic Centre "should embrace an area sufficient to accommodate, on great occasions, large gatherings of citizens. It should," he says, "afford ample space for the accommodation of pageants and for the formal reception of delegations from other cities or foreign countries."

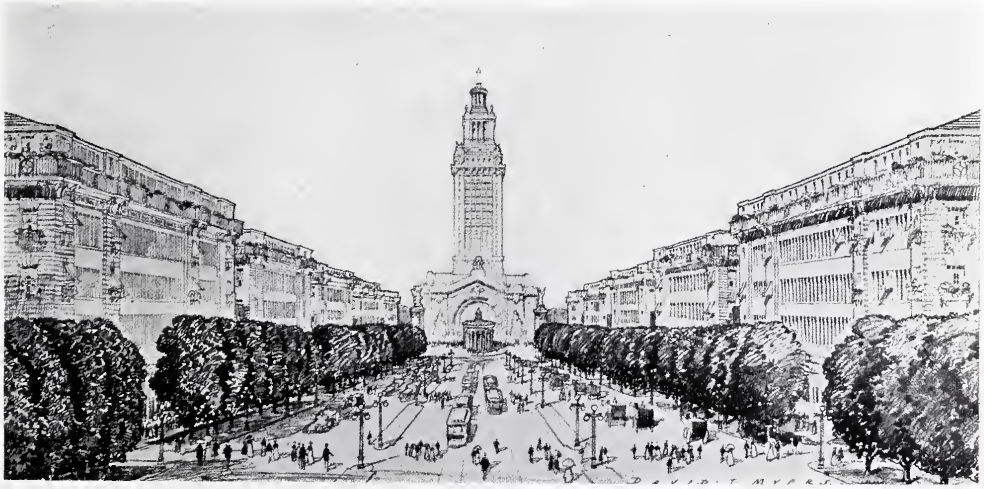
The chapter on Municipal Decorations, though largely dealing with street intersections and concourses, includes a discussion of building height. This is interesting as another important contribution to the education which we Americans are now generally receiving on the subject. That it is not true that business in Seattle demands now, or will soon demand, very high buildings, is evidenced, Mr. Bogue believes, by the fact that "the great cities of Europe and South America—those whose population approaches or exceeds a million—have grown to their present size and have conducted a commerce equal to that of our largest cities without the skyscraper"; and by the fact that "all the buildings of over twelve stories in height in the city of New York" could be placed in a certain limited portion of Seattle's present business district, where to-day the average height of the buildings is less than four stories. "Skyscrapers," he says, "do not by any means denote the highest civic development, rather do they exemplify the utter lack of considera-



VIEW INTO CIVIC CENTER OLYMPIC MALL, SEATTLE, WASHINGTON.

tion for the better life of the city." He suggests that the height of Seattle buildings "should be fixed at an elevation proportionate to the open area, and, if possible, a similarity of treatment as to the height of stories should be regulated; especially should a uniform height of cornice line be established for the buildings in the Civic Centre." He urges also "the desirability of using light colored building material."

Coming to the chapters on port, waterfront and transportation improvements, we come to an exhaustive discussion of matters of exceeding importance in the Seattle Plan but hardly inviting review here. But a significant condition is interestingly put in the statement that "the cost of transporting five tons by wagon will cover transportation of fifty tons by rail or five hundred tons by water;" and the following quotations give suggestion of the point of view with which this part of the planning was undertaken: "Commercially speaking, when a city ceases preparation for the future, it ceases to grow. * * * Seattle's greatest commercial asset is her harbor. * * * Unless a seaport city speedily emphasizes its natural advantages, it will encounter the danger of being outstripped by some less favored rival. * * * Every judicious investment in harbor improvements should tend to decrease rather than to in-

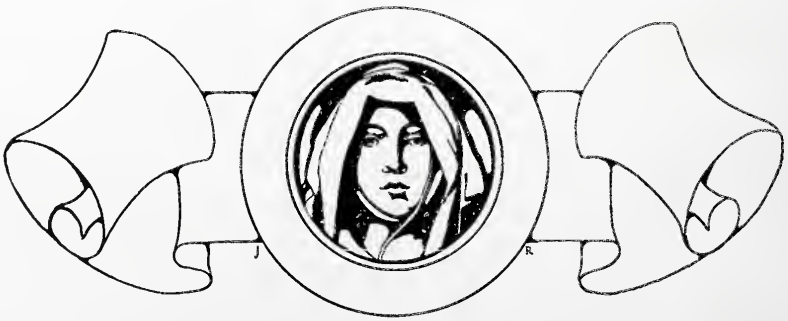


CENTRAL AVE., LOOKING NORTH TO CENTRAL STATION, SEATTLE, WASHINGTON.

crease the tax rate." The recommendations put forward in this part of the report are urged with great earnestness, and appeal is made for an immediate beginning of the work. In response to this appeal, the matter goes before the people, for adoption or rejection, in March. Those who know the Seattle spirit, who read this report, and who are familiar with the great things the city has already done can hardly doubt the outcome.

In presenting the report, the Municipal Plans Commission emphasizes the point that the plan is elastic; that its mere adoption "does not require any expenditure whatever; nor does its adoption exclude changes and improvements not specifically provided for therein." The Commission adds: "Its adoption means simply the acceptance of it as a plan of action, a method of procedure, and that, when changes and developments are initiated by the people, authorized by their vote and ordered by the City Council, they shall be made systematically. It means the ultimate saving of vast sums which, in the absence of a uniform system, would be wasted. If the need for the fulfillment of any portion of the plan does not arise, the fact that it is embodied in the plan does not require that it be undertaken or that money be expended thereon. On the other hand, whenever in the minds of the people conditions do require the fulfillment of any portion of the plan and funds are voted therefor by them, it may be entered upon with every assurance of its permanent character and lasting utility." These remarks, which happily apply with equal force to any well-made city plan, are admirably put, as is also the following: "In the development of the plan the Commission has come to a forceful appreciation of the fact that the diverse interests and activities, and the various sections, of the city are so interwoven as to make a simplified general plan a necessity."

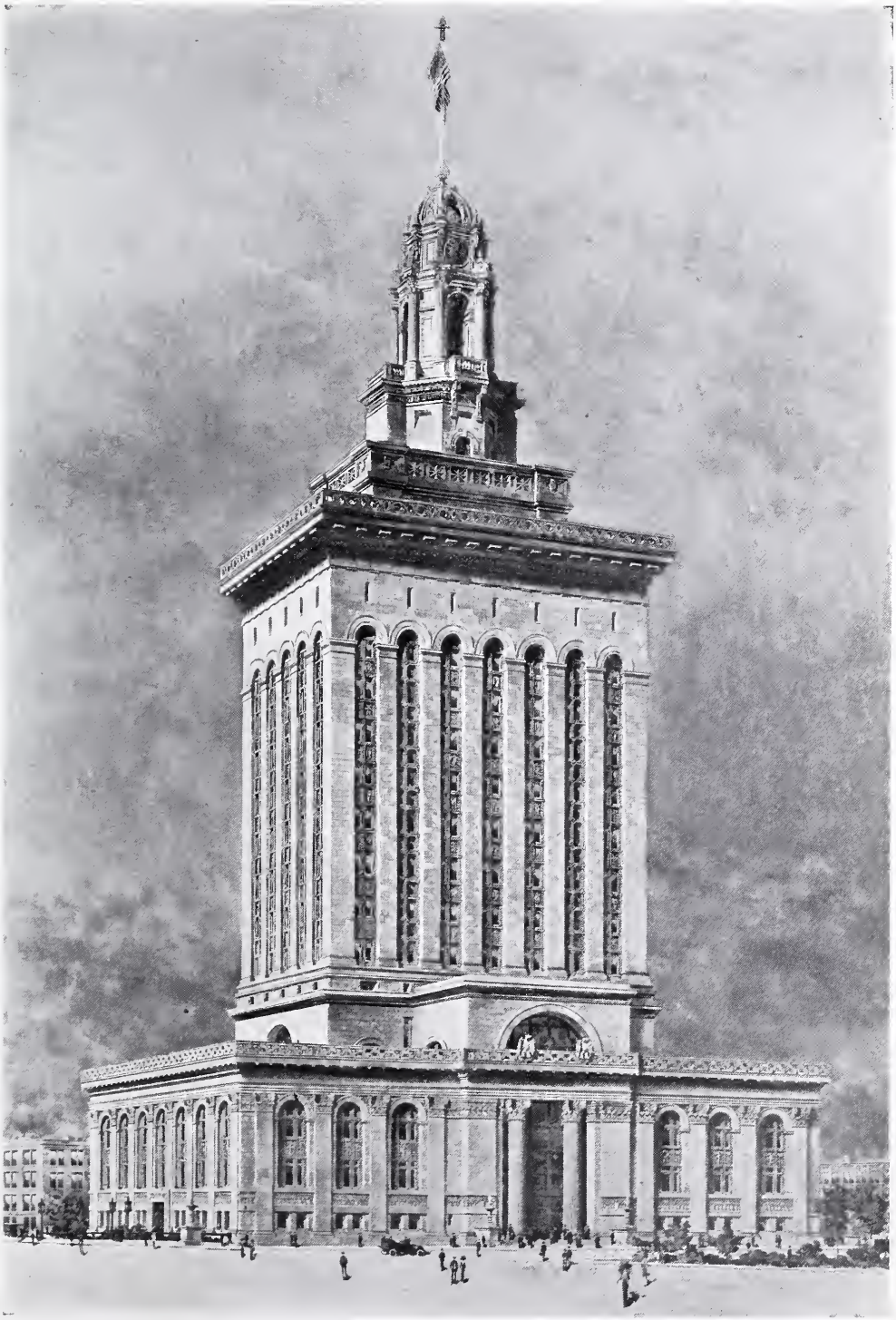
Unfortunately, of the handsome edition of this report it was possible to print only five hundred copies, so that comparatively few have found their way out of Seattle. This edition, in common with most of its kind, is profusely illustrated. Not only, however, are many of the pictures beautiful, but they are exceptionally well chosen to illustrate and enforce the text. In fact, the Plan of Seattle makes such interesting contribution to the general subject of city planning that a larger, even if cheaper, edition, which can be widely circulated, is much to be desired.




PORTFOLIO
OF
CVRRENT
ARCHITECTVRE



THE NEW BUILDING FOR THE BANKERS' TRUST CO., NEW YORK CITY. TROWBRIDGE & LIVINGSTON, ARCH'TS.



PERSPECTIVE OF THE NEW OAKLAND CITY HALL,
OAKLAND, CAL. PALMER & HORNBOSTEL, ARCH'TS.



NEW CANAAN TOWN HALL, NEW CANAAN, CONN.
Edgar A. Josselyn, Architect.

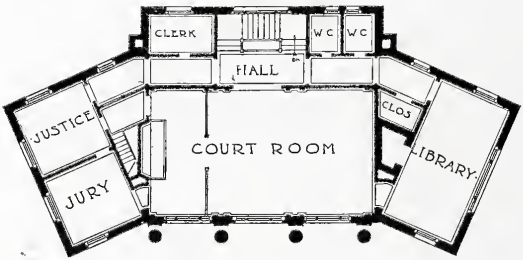


See next page for plans.

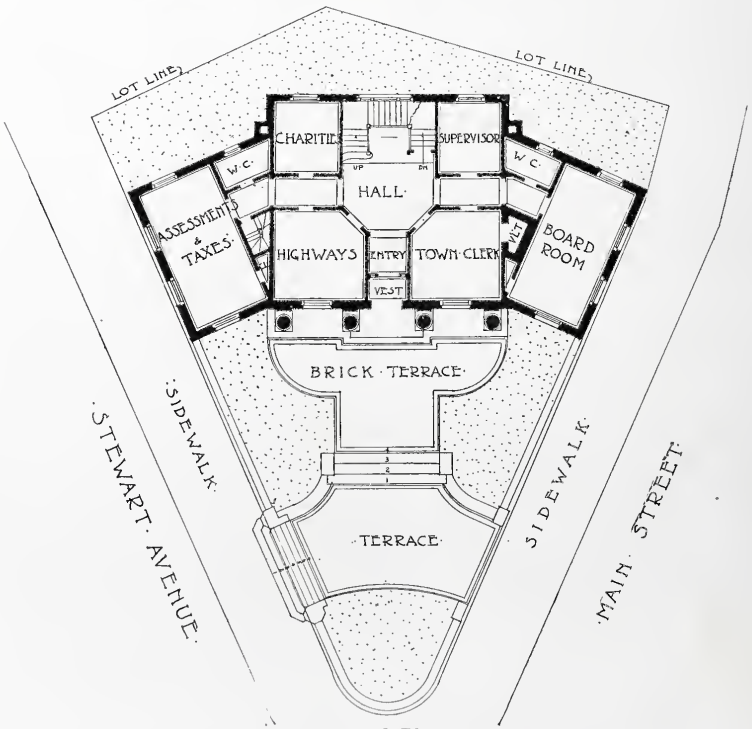
TOWN HALL AT HUNTINGTON, LONG ISLAND.
PEABODY, WILSON & BROWN, ARCHITECTS.



Seal.



Second Floor Plan.



Ground Plan.

TOWN HALL AT HUNTINGTON, L. I.
Peabody, Wilson & Brown, Architects.

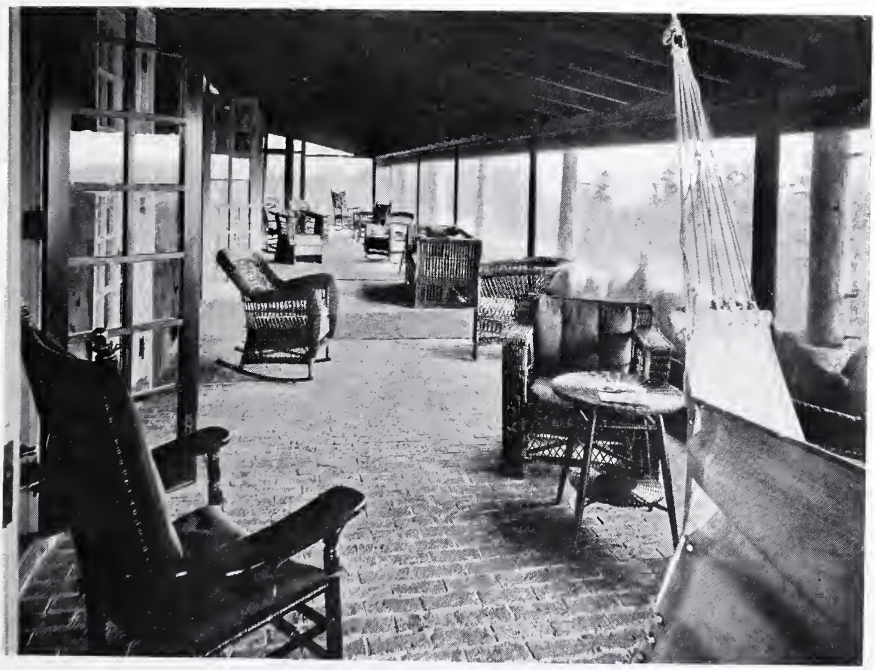


ENTRANCE DETAIL — TOWN HALL AT HUNTINGTON, LONG ISLAND. PEABODY, WILSON & BROWN, ARCH'TS.



"JOURNEY'S END" HOUSE OF
MR. HAYDEN, LEXINGTON, MASS.



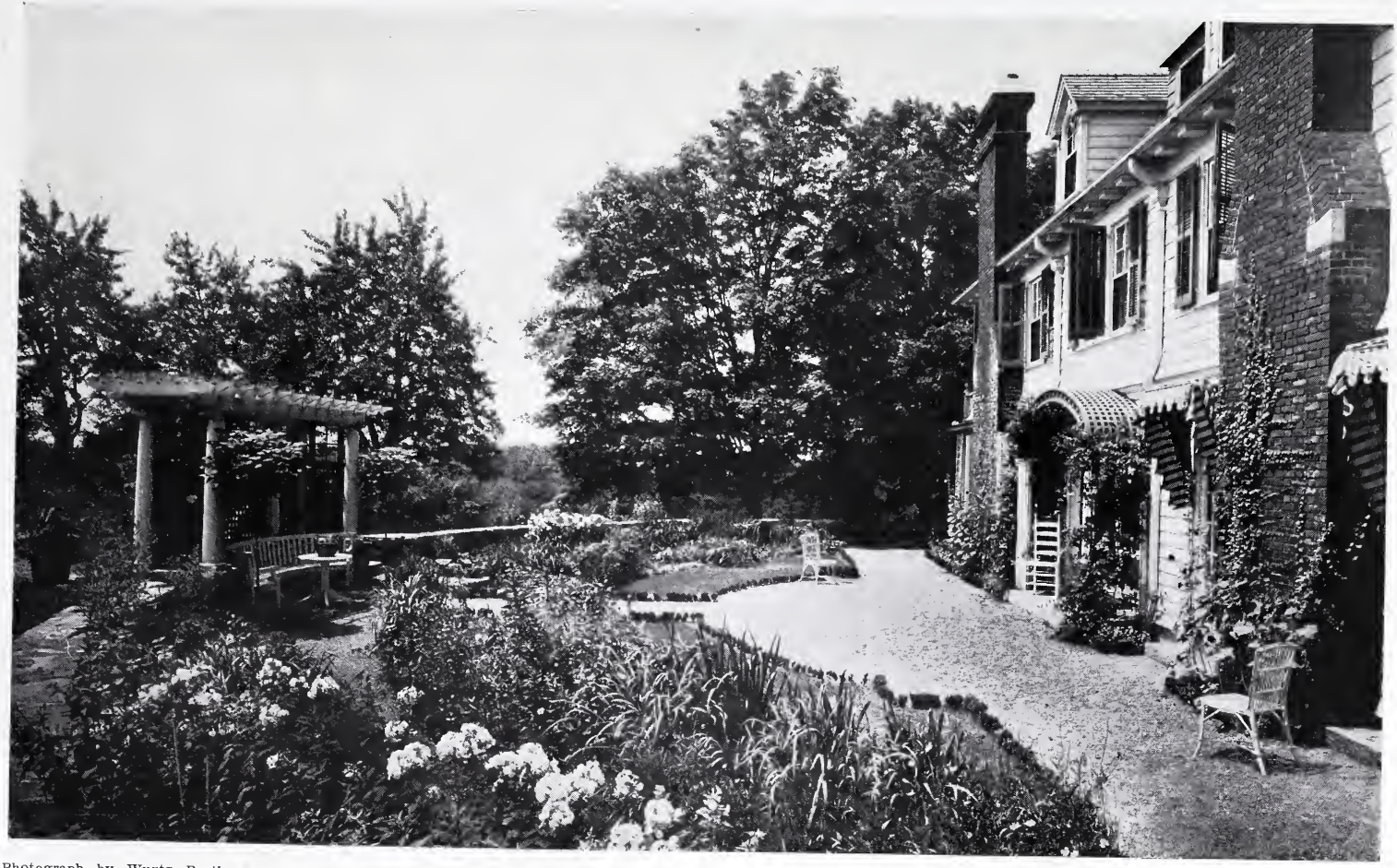


"JOURNEY'S END" HOUSE OF
MR. HAYDEN, LEXINGTON, MASS.



Photograph by Wurts Brothers.

RESIDENCE OF CARL SCHULTZ PETRASCH, ESQ.,
MT. KISCO, N. Y. LUDLOW & VALENTINE, ARCH'TS.



Photograph by Wurts Brothers.

RESIDENCE OF CARL SCHULTZ PETRASCH, ESQ.,
MT. KISCO, N. Y. LUDLOW & VALENTINE, ARCH'TS.



ENTRANCE DETAIL—RESIDENCE OF CARL SCHULTZ PETRASCH, ESQ., AT MT. KISCO, N. Y. LUDLOW & VALENTINE, ARCH'TS.

Photograph by Wurts Brothers.



Photograph by Floyd Baker.

CONNECTICUT SAVINGS BANK, NEW HAVEN, CONN. TRACY, SWARTWOUT & LITCHFIELD, ARCH'TS.



IRVING K. POND, ARCHITECT, OF CHICAGO.—THE RETIRING PRESIDENT OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THE FORTY-FIFTH ANNVAL CONVENTION OF THE AMERICAN INSTITVTE OF ARCHITECTS



THE PRESIDENT'S ADDRESS



THE AMERICAN INSTITUTE OF ARCHITECTS is assembled once again in convention. It is the function of this assemblage through pronouncements and carefully considered enactments to minister to the welfare of the Institute, and incidentally, in so doing minister to the well being of the profession at large, for the status of the entire architectural profession in America is determined by the pulse beat of the American Institute of Architects. A realization of this fact must fill the Institute members with a certain sense of responsibility.

Let us hope that the deliberations of the forty-fifth convention may be conducted with the same idea of advancing ethical and aesthetic standards and in the same spirit of mutual concession and harmony which prevailed in San Francisco last year. Animated and forceful debates are to be welcomed for their invigorating and clarifying qualities, but the many-sided problems which are liable to seek solution at this time should be discussed altogether upon their merits, without personal animus, and respectful consideration should be paid any idea which is advanced for the general good. Ideas and not individuals or committees rule in the American Institute of Architects. Too often when the activities of the Institute have been under consideration, both in convention and in public and private discussion, it has been assumed that the officers or the board or the committees were trying out some special scheme of their own, whereas in fact they were endeavoring solely to carry out the instructions of the convention. Although the by-laws give the Board of Directors almost unlimited authority to act for the Institute between conventions, it in reality seldom does act in other than its executive and judicial capacity. Officers, boards and committees find sufficient exercise for their powers in performing the duties prescribed in constitution and by-laws, and in trying to carry out the expressed will of the Institute. In short, officers, boards or committees do not make laws or rules for the Institute, but the Institute in convention makes the laws or rules, and officers, boards or committees endeavor to put them into execution.

Let this be remembered in discussing the questions which arise or in commenting on the activities of any executive branch of the Institute.

The committees of the Institute deserve the most grateful recognition. The time and energy spent by many committees in carrying out the will of the Institute is exceedingly great, and only the initiated can appreciate the continuing sacrifice. The committee chairmen of necessity bear the brunt, but their labors may be lightened by sympathetic support within the committee. Therefore, for the good of the cause, may your president suggest that hereafter any committeeman who feels the shroud of apathy drawing around him, or one who, by ill health, is incapacitated, or one who for any reason cannot come to his task with clean hands, should resign and let active, pure blood fill the place.

Under our expanding conditions committee work is bound to become more and more complicated and burdensome to

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[EDITOR'S NOTE.—The convention for 1911 was held on December 12th, 13th, and 14th at the New Willard Hotel Washington, D. C., and was presided over by President Irving K. Pond.

THE ARCHITECTURAL RECORD wishes to give the widest publicity to the purposes of the Institute, and to join with its members in an endeavor to supply reliable information to all those interested in architecture—the Architect, the Owner and the Builder. We feel that the following papers and reports will be read by thousands and that a better understanding between architect and client cannot help be established.]

the individual, and therefore it seems to your president that the office of the secretary not only, and as speedily as possible, should be put upon a modern business basis, but should be equipped to be the centre of committee operations, all material being gathered by subordinates in the office, formulated and disposed under the direction of the various committee heads. This means increased expenditure, but in no other manner, it would seem, can the growing committee work be prosecuted to the relief of the individual and the welfare of the Institute. It seems desirable at this time to reaffirm certain of the principles for which the Institute stands, that the willful perversions of many and the ignorance of few, mainly outside of, though sometimes within the organization, may not serve to lessen the good influence the Institute seeks to exert.

The American Institute of Architects stands as guardian of the interests of the client and the community quite as much as the welfare of the individual practitioner and the profession generally. Its codes are to protect the client as well as the architect. Its fundamental ethical principle is based upon the idea of justice and fair dealing as between man and man, be they architect and client or architect and architect;—upon a recognition of individual rights and individual duties. If schedules are established, it is not that the architect may have a lever with which to pry loose undeserved money from the client—but that both client and architect may have an authoritative basis on which to compute values. If codes of ethics are formulated, it is that the unthinking and morally untutored may know what always instictively has guided the actions of unselfish and fair-minded men—and themselves be guided.

If competition codes have been put into effect, it is not that the rights of the client be interfered with, or the liberty of the architect be limited, but that the duties of each under the premises may be made manifest, and if the schedule and canons of ethics are incorporated in the competition code, it again is not to curtail the right of the client, but to suggest to him that under the rule of common decency he has no right to play one architect as a pawn against another, or seek to command the highest technical and professional skill at a price at which the scantiest and most indifferent service cannot begin honestly.

The operations of the code to date would seem to indicate that the public recognizes their worth and inherent justice to a wider extent than does the profession even, for in a multitude of instances clients, upon seeing the code, have voluntarily modified their program, while in more than one instance an "unprofessional" competition has been conducted because the architect involved did not attempt to familiarize the client with the code, or because the architect involved did not wish a fair competition, relying on "personality" and "pull" to land the prize.

Another principle on which the Institute firmly rests is that in its membership shall be included only men of the fullest moral and intellectual stature, men who will not betray their client, men who will not try to deceive themselves, men who hold the welfare of the community paramount to their own or their clients' individual interest, men who know the value of beauty and decency as a communal asset and are willing to make sacrifices for the ideal, men who know that the relationship between personal morality and the power to create ideal beauty in the individual is very intimate, men who know that the capacity to appreciate ideal beauty rests upon a groundwork of broad culture and deep sentiment rather than upon commercial success. The defection from its ranks of men wanting in the above qualities cannot permanently or long, if at all, cripple the work of the Institute, even though in popular estimation they hold an exalted place in the profession. The strength of the American Institute of Architects lies not in the number but in the moral and artistic calibre of its members.

Personally, your president would hail the time when the correct apprehension and application of the ethics of business and of competitions and of the set rule shall be as a matter of subconscious per-



GEORGE B. POST, ARCHITECT, OF NEW YORK CITY, RECIPIENT OF THE GOLD MEDAL OF THE A. I. A., PRESENTED DEC. 13, 1911.

formance in the mind of the practitioner and the period of the Institute reunions be given up to the cultivation of the social amenities and the development of the sociological, ethical and aesthetic plans of architectural art. Personally, your president would rather in this, his final address, consider the aspect of our American civilization and the possibilities of its adequate expression in architecture, but the reports from various committees of the board indicate that certain ethical questions are ripe for discussion and cannot be ignored by the president at this time, and he, therefore, without arguing the case, suggests, and he hopes needlessly, that the convention consider seriously, unimpassionately and impersonally all phases of the matter before changing radically the essential ideas underlying any code of the Institute. Consider carefully if a backward moral step will result from the change; consider if in any sense just relations between man and man will be impaired. Whatever has tendered to impede healthful action may well be cut away, but consider carefully before touching the vital parts.

If any phase of the competition code, so-called, comes under consideration, please remember that individuals, many of them, and chapters even, have come into the Institute knowing the full meaning and bearing of that code and intending to live up to it, and let this fact have weight with the older members. Remember, too, that great municipalities are favorable to it, one at least having introduced it into its charter.

Remember that great corporations and institutions have considered it favorably, and that only politics and ignorance have condemned it in principle—and let this fact count in your deliberations. Clear up ambiguities in all the codes but maintain all standards of fairness and justice in personal dealing.

Some little time since the American Institute of Architects was jocularly denominated a "gigantic trust." In some quarters this "soft impeachment" was regarded seriously—so seriously, indeed, that your president was asked to refute the charge in print. Certain it is that the American Institute of Architects is not a monopoly, for it does not contain all the morally-minded and technically-skilled members of the profession. Indeed, there are many outsiders who consider themselves ethically and aesthetically superior to any individual and collective exhibit the Institute can make. The aesthetic phase may be ignored now, but how do they square the ethical? Their position seems to be that of one who rises early, surreptitiously reads his neighbor's newspaper and returns it properly folded to the door stoop, enjoying the fruits of the neighbor's toil without sharing the cost. Less than one-fifth of the number of so-called practicing architects of the United States are in the Institute, and this little one-fifth asks to be permitted to turn over to the big four-fifths the work of any client who does not desire to play fair. At the same time the Institute in no way presumes to interfere with the rights of individual contract on the part of one of its members. This attitude hardly smacks of monopoly or of trade unionism. The Institute is not unfair when it suggests—yes, insists—that at least the minimum rate prevail in competitions. Ignoring the great economic waste involved in competitions, for which the client never can compensate, the minimum rate is none too large for the service of men of Institute calibre, whether in the Institute or not, and it is fully within the province of the Institute as an altruistic body to aid a man in the establishment of his right and in the accomplishment of his duties. A man may have a legal right to sell himself for less than the value his creator intended should be placed upon him—but he has no moral right, and no body of morally-minded men is going to organize to aid and abet him in his self prostitution. The Institute has saved many a man from himself. Your president deplores again the seeming necessity for referring to these matters of professional ethics which should long ago have stirred minds and consciences to subconscious activity and have not.

Your president had the honor to represent the Institute at the Ninth International Congress of Architects in Rome

—being also one of those delegated to represent the government of the United States. Matters pertaining to the congress are fully set forth in the committee reports. It also was the good fortune of your president to be present at the Council dinner and at the opening session of the Royal Institute of British Architects —where he had the honor to second the vote of thanks to President Leonard Stokes for his excellent inaugural address. The cordial reception of your president shows the high esteem in which your Institute is held. Messages of kindest regard were given to your president—to transmit to this body. The problems which the Royal Institute of British Architects are called upon to solve much resemble our own, and every forward step we take aids them, as every advance they make reacts as a direct benefit to us.

Your president cannot refrain from referring at this time to the loss which not only he personally, but the whole Institute, sustained in the untimely death of John M. Carrère. Especial mention of Carrère's enthusiastic work and unselfish service to the Institute was made in the president's address one short year ago. To-day he is not with us, but his gentle spirit is upon us as a benediction. The Institute has lost a power, and every member has lost a friend.

The program is so full that your president refrains from further intruding upon the time of the convention.

REPORT OF THE COMMITTEE ON EDUCATION, A. I. A.

RALPH ADAMS CRAM, Chairman

SOME FOUR OR FIVE YEARS ago this committee began a systematic study of educational conditions in America as these apply to architecture; in the beginning it devoted itself to the development of what, with unjustifiable assurance, perhaps, may be called a philosophy of architectural education; then it initiated a more careful scrutiny of scholastic facts and a preliminary effort to make these facts fit its theories, or, when such correspondence seemed impossible, to modify the facts themselves rather than abandon its preconceived and tenderly cherished opinions. During the past year more than ever before it has applied itself to correspondence and investigation, and in this process it has had borne in upon itself two facts of salient significance; first, that while definite steps have been taken in at least one university toward making the more strictly architectural training a graduate course, many degrees in architecture still represent courses that embrace too little training in those branches of study that tend to the broader development of the students, and in many localities the colleges apparently fail to appreciate the importance not only of a complete architectural department, but also of general courses in the fine arts for the whole undergraduate body. Second, that there is apparently a very complete lack of interest among architects as to the kind and quantity of education that is or may be offered by the recognized schools or other agencies of training.

On the other hand, let it be said at once that both these statements must be qualified by testimony of an encouraging nature; in no case are any of the organized schools of architecture found to be hide-bound or unfriendly, all are ready to receive suggestions and to act on them when they justify themselves or when such action is materially possible, while the cold and almost unbroken silence that was the sole reply received by the committee to its circular letter sent to every member of the Institute, and the response from the presidents of chapters to the letter sent them (a response cordial only by contrast), were mitigated by the enthusiastic and grateful letters received from

one or two unanticipated sources, and by the active interest that has developed at several widely isolated points.

In spite of this, however, we are still impressed with the loss that follows from a too great individualism in education and the singularly languid interest in educational matters that marks the profession as a whole, and this year we are about to try an experiment, nothing less, indeed, than an educational conference on the first evening of this convention, to which we have asked each chapter to send a delegate, in the hope that so we may take a first step toward co-ordinating the educational interests of the country, eliciting direct statements from the several sections as to conditions, desires and possibilities, and stimulating interest in this fundamental and vastly important consideration.

We believe the results of this conference may be of interest, but they can be available only for the use of the committee of next year, and since the conference itself may safely serve as a safety-valve for the theories of this committee and its conferees, it is not necessary this year for us to burden the convention with them, rather we may pass at once to a categorical consideration of the concrete facts that we have to report to the Institute.

And first as to the circular letters emitted by this committee; these were considered both eloquent and stimulating (by the committee itself), yet four responses only were received to the letter to members, one from Seattle, one from South Carolina (very appreciative and encouraging) and two from Philadelphia, one from without the Institute being a request for information in regard to facilities for architectural study in that city. The letter to presidents of chapters has been fully answered by Philadelphia, Washington, D. C., Los Angeles and Pittsburgh—Boston, New York and Detroit being also fully reported on by members of this committee. It has been acknowledged and referred to committees by Colorado and Illinois. "The rest is silence."

It may be remembered from our report of last year that Columbia College was the first to accept our suggestions and establish definite courses for extra-collegiate students in applied mathematics, construction, history, ornament and design. These were given under university auspices in the building of the Society of Engineers, downtown, and were surprisingly successful, except in the case of the history course, which acquired no popularity whatever. This committee was convinced that extension work, to fulfill all its possibilities, should be downtown, near the architectural offices, but the cost was very great and, as a matter of fact, the many students saw no objection to going uptown to University Heights, therefore this year the courses are being given at Columbia, and are as last year except that the general course in history has been omitted and its place taken by detailed historical courses; ancient architecture this season, to be followed by mediæval architecture next year. The work now provided by Columbia covers practically all the first and second year work in the architectural department of the college, the courses being properly called "extension" courses; there are eleven courses in all, with a total registration of 134, many individual students, of course, being registered several times; the fees range from $5 to $20 for each course. Elementary drawing is naturally the most popular, with twenty-four students; history the least desired, for only six have entered in the two courses offered, a sad commentary on the ideals and the breadth of view of the architectural draughtsman.

In Philadelphia, last year, the University of Pennsylvania, at the instigation of this committee, instituted classes in mathematics and history; this year these courses are being continued, with the addition of the whole matter of architectural design, which, carried on so long and successfully by the T-Square Club, has now been surrendered to the university, where the students get the benefit of the college faculty and the library.

In Boston all efforts to get hold of some of the funds available for extension work have thus far failed, and it



RALPH ADAMS CRAM, ARCHITECT, OF BOSTON, MASS.—CHAIRMAN OF THE COMMITTEE ON EDUCATION, A. I. A.

has remained for the Architectural Club to shoulder the whole responsibility, as it has done in the past, and finance it from its own exchequer, with some assistance from the Boston Society of Architects, and certain members of the profession. Except in name and its lack of official support, this is practically university extension work of the best and most highly organized quality, although not strictly speaking extension work, as the courses are not identical with courses given in any college and do not count toward any established degree. The activities are enormous, the registration equally so; the instructors are the pick of the Harvard and Technology Faculties, including Professor Warren and M. Duquesne; the enthusiasm quite unexampled. There are courses in architectural drawing, design (four sub-classes), mathematics, construction and history; there is also a life class. Following the suggestion of this committee, it has divided its classes into four groups, so that all students are expected to acquire education instead of indulging in specialization; there are, first, preliminary design and mathematics; second, order problems, drawing from casts, construction; third, Class B plan problems, drawing from life and history; fourth, Class A plan problems, drawing from life and history. Every student taking a design course is expected to take the other courses in the group, and are so doing in almost every case.

The first group is open to all comers; the three other groups to members of the club. Each suppplementary course comprises twenty-five lectures, and the fees are, for the whole first group, $8 for non-members or $2 for club members, and for the other three groups, ranging from $2 to $12 a course in addition to the usual club dues. The total registration is 194, there being over 100 individual students.

The design problems are carried on under the competition rules of the Society of Beaux Arts Architects; the mathematics, construction and history course are laid out on the assumption that little outside work can be expected (none being required), the mathematics is distinctly "applied mathematics," covering those problems in geometry, descriptive geometry and trigonometry which lead most directly to the problems the draughtsman will have to solve in the office; the construction course is elementary, dealing not with mathematical questions so much as with methods of construction and the characteristics of materials; the history course is broad and comprehensive, illustrated with lantern slides and showing the principal steps in the development of the several styles and ending with a practical demonstration by examples of ancient and modern work, of the application of precedent to actual problems. In contrast to the experience of Columbia, it is interesting to note that this course began with a registration of 16, and has since increased to 25.

In Los Angeles the local Architectural Club maintains four classes, viz., out-of-door sketching, construction, drawing from the life and design, the latter admitting to competition for an annual scholarship of $1,000.

In Detroit there is no architectural education of the kind we are considering, but the new School of Design may possibly initiate such courses. The University of Michigan has announced its readiness to give extension courses in architecture in Detroit whenever there is a demand for them.

In Pittsburgh and Chicago we find no need for extension courses in addition to the work already being accomplished by several local agencies. In Seattle advances have been made toward draughtsmen, but they fail to respond to the offers of instruction at night in design and the allied courses of study; the State University is not inclined to render any assistance, and nothing is being done. In Denver only very limited architectural education is provided by the State University, such as there is being merely an adjunct of the engineering department and without the direction of any professor of architecture, or even of a graduate of a recognized school of architecture. An advanced course has been under consideration, and may possibly be put into effect next year.

From Washington, D. C., we received

a most thorough and altogether admirable report on local conditions; a special committee investigated the question fully, noted the inefficiency of several agencies of evening instruction, the creditable work in design carried on by the Architectural Club, the unfortunate abandonment of a regular department in Geo. Washington University through pressure of material considerations, and offered specific suggestions to its chapter as to what it could and should do in co-operation with the Architectural Club in its educational work, the giving of talks on the general conduct of the architectural professions and the immediate concentration of its efforts toward establishing a chain of architecture in such a way as to use to best advantage the various educational opportunities of the city. If all chapters would appoint committees that would analyze local conditions in this thorough manner and present definite plans of action in as forceful a way much would be accomplished.

From Columbia, South Carolina, this committee received one of its most encouraging and appreciative letters. At the University of South Carolina a class in architecture has been carried on for four years, with considerable success. The university authorities are keenly alive to the desirability of a regular course in architecture, but no funds are available. An evening class open to all students and local draughtsmen has been started, and the first steps taken toward the establishing of general educational courses in architecture.

The question of a graded plan of credits in architectural study was referred to this committee by the last convention; since then the Architectural League has published its revised and amplified schedule, and we commend this to the attention of members, without analysis or criticism, both of which, we believe, lie rather within the province of professional educators. Such a plan may well be initiated and blocked out by architects, but the technical discussion is a matter for those to conduct to whom would fall the duty of putting the plan in operation.

As to the matter of State licensing vs. Institute licensing for architects, we can only repeat our argument of last year, viz., that in the opinion of this committee a man should be tried, tested and "admitted to practice" by his peers, *i. e.*, the American Institute of Architects, precisely as a lawyer is admitted to the bar by his peers. Until this is possible we would like to see Institute membership accepted by all licensing boards as satisfactory evidence of fitness to practice, as is now done in New Jersey and Colorado, if this can be shown to cause no confusion through the acceptance of two standards which may or may not be on a par with each other. We believe that in the main the licensing boards are composed largely, if not entirely, of architects, and that it is of the utmost importance that where this is not so the laws should be properly amended and that all possible precautions should everywhere be taken to insure the appointment to these boards of none but men of the highest professional standing.

This committee has been deeply and unfavorably impressed for many years by the lack of knowledge of the most rudimentary architectural ideas, and a corresponding contempt and disregard therefor, exhibited by many engineers, as well as those of eminence and international reputation as those of more modest attainments. In some instances this ignorance and contempt are apparently complete and have resulted (in cases that have come under the observation of members of the committee) in mutilated architecture and, in the end, actual loss of efficiency in certain structures, and a very real financial loss. In one instance a group of architects was called upon to do what it could toward redeeming—artistically—an engineering project already structurally complete; the engineering here was wilful in its defiance of all architecural laws of planning, and the result was both ugly and extravagant; subsequently the same group of architects had the initiative in a similar project, and the contrast between the two results was notable—even by the strictly utilitarian owners. As a matter of fact, the training of an architect gives him a singularly broad

and comprehensive vision, while that of the engineer is so intensive it frequently produces what one distinguished college president has denominated "mere narrow-minded specialists."

With this in mind, this committee opened negotiations with the several schools of engineering, and at the time this report was formulated had received answers from Washington University, St. Louis, the University of Illinois, Ohio State University, the University of California, Massachusetts Institute of Technology, and Cornell. Our recommendations were to the effect that joint problems should be given for both engineering and architectural students with such reciprocal instruction as would make such joint work possible, the idea being that every architectural student should have a definite minimum of structural and engineering education, every student in engineering a definite minimum of architectural and cultural training. All the correspondents stated it as their opinion that the idea was a good one.

This matter is one of greater importance than appears on the surface. For several generations all education in America has tended toward "free electives," high specialization, "bread and butter" courses, the object of which was to make the student a wage-earning animal at the earliest moment and in the line of narrow, intensive activity. The result has had its limitations so far as the making of character and the development of culture and education are concerned. Within five years an amazing change has revealed itself, and now the pendulum swings back again toward broader and more liberal culture, with a certain amount of faculty authority taking the place of an uncertain amount of undergraduate license. We cannot lag behind this great reform, which is one of the most significant and encouraging events of recent times. Our schools must see to it that every architectural student is first of all an educated gentleman, in the old sense of the phrase; that he does not give all his time to design problems or rendering exercises, to the exclusion of history, both general and architectural, literature, philosophy and Latin; or to structural engineering, without a compensating study of that civilization, both past and present, that should condition all he does. We have found that in the extension courses that now exist—except in the case of Boston—lectures on history are the least popular; this year, for example, New York could produce only one man to take ancient architectural history in the evening classes, and but five for the mediæval history, while twenty-four students took architectural drawing. This is all very natural, for the driving motive is quick increase of pay, but it means, if continued in, simply one thing, and that is an overplus of clever but essentially ignorant draughtsmen, who will remain such to the end of their days, and a dearth of men of sufficient cultivation and intelligence to become efficient practitioners of architecture. Apart from the schools, also, the architect himself may have a hand either in perpetuating an evil, or establishing a good. We are all prone, for commercial reasons, to drive a man who is particularly able in one line, straight along that narrow line, with a look neither to the right or left. If he makes catchy sketches, he is forced to sketch himself into the grave of watery deliquescence; if he is a good detailer of Georgian or Gothic ornament, he hammers at it from year to year exactly as the man behind the machine in a shoe factory puts on heels for eight hours a day, year after year, until his brain is atrophied, and he assaults the motor man or the elevator boy "to escape," as Chesterton says, "from the hell of bare existence."

Such a course may be in line with the principles of "efficiency" in office management, and profitable for the architect, though this committee is inclined to doubt it, but no one can claim that it is quite fair to the draughtsman. Last year we laid stress on the very real obligation that rests on the employer to see that his men have all possible opportunities for outside study, and that they are urged to take advantage of all such opportunities offered them; this year we

add to this a recommendation for mercy to the specialized draughtsman, and a plea that so far as possible he be given opportunities to develop on lines other than those which capacity or accident have laid down for him. After all there was a certain rough generosity and justice—as well as a strong sporting element—in the custom of the late Joseph Pulitzer, of suddenly transposing the Wall Street and society editors, in giving the baseball editor the music criticisms for a month, and in intrusting to the political prophet the religious functions of the week. The element of humor prevented the results being as hard on the public as would a similar shake-up in an architect's office, for humor is not a marked characteristic of the average client. We do not urge measures so drastic or so revolutionary, we only urge that the natural right of the draughtsman to life, liberty and the pursuit of happiness—which simply means that the man who has drawn nothing but classical mouldings for four years would like a chance at a set of quarter scale plans now and then—should be regarded by the architect and cheerfully conceded.

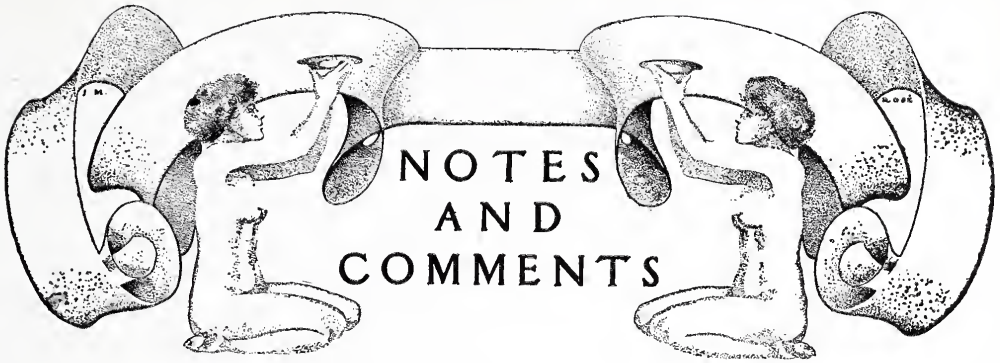
Two other matters have been considered by this committee, that of definite teaching in the several architectural schools of the rudiments of professional ethics and the nature and function of the institute, and that of the relation of juniors and draughtsmen thereto. Columbia and Pennsylvania already have such definite ethical teaching, and Cornell also, though perhaps not quite so formally worked out; the others cover the ground in a measure, and in an indirect way. In the opinion of this committee such teaching is not only of the utmost value, but it cannot achieve its full effect until it is given *directly*, and treated as a matter of importance equal to design, construction and mathematics. We urge, therefore, on all the schools, consideration of the question whether it is not well for them to provide specifically in their curricula for a regular, even if brief, course, in architectural practice, as this manifests itself through the relations of an architect to his employees, his clients, his fellow architects, the public and the American Institute of Architects.

It has come to our attention that in some of the schools no consideration whatever is given to modeling; now in the opinion of the committee this is a very regrettable fact. Not only is sculpture so intimately allied with architecture that it would appear almost necessary that some slight practice should be given in its elements, but it is demonstrated that modeling is the best possible method whereby students may be brought to think in three dimensions rather than two; a state of mind which is the foundation of architectural ideas. All the great architects of the Quattrocento and the Cinquecento—to go no further back—were sculptors as well as architects, sometimes sculptors before they became architects. We recognize drawing from life as an essential part of architectural training. This committee is disposed to prolong this to its logical conclusion and to urge on the several schools that, in graduate courses at least, practice in modeling should be continued to the point where the student is given practice in modeling the human figure in the round.

We have no further light on the question of the formal relations of draughtsmen to the institute, and can only reiterate our statement of last year to the effect that some form of such relationship is, in our opinion, most important. We referred to three possibilities in our last report; junior membership in the several chapters, a junior body associated with but not an integral part of the institute, and membership in the Architectural League, which might bear the same relationship to the institute the Architectural Association bears to the Royal Institute of British Architects. We still give our conditional approval to the last of these schemes—in principle at least—but the question, while one of vital and pressing importance, is so complex in its ramification that it requires more extended study.

Finally, and lest we should break our record of infallibility in the production of tenuous theories and possibly im-

practical principles, we desire to say a word as to that education of the public which should be a corollary to the education of the architect. A public right in instinct or trained in matters of art will act as the demand which, according to a law of economics, is sure to produce the supply, but conversely a trained body of architects is by no means sure to breed a trained appreciation. We have in America the best and most efficient group of architectural schools, by and large, to be found anywhere in the world. Each may perhaps be bettered in one way or another, in minor ways, but the great question that is really before us is not the improvement of the schools, or the increase of their numbers, for while certain sections of the country might well support a first class school, we are strongly opposed to the multiplication of those that are second rate; it is not the raising of the many schools of this class to a rank of first importance, until every college and university has its own school of architecture, it is rather the education of the public—or to speak reasonably and not in hyperbole—a portion of the public, to a point where they will understand what architecture is, what it represents and what the profession of architecture is and stands for. Of course, there are certain types of civilization that produce as a by-product just this artistic appreciation, this comprehension of art and demand for it as a mode of self-expression; there are other types which do nothing of the kind, and unfortunately our own appear to belong to this latter class. How far we can fight an established type of civilization, imposing on it from without a new set of ideas, is a debatable question. We have tried the experiment and after many modes with, it must be confessed, rather indifferent results. Our municipal and State governments seem to be generally averse to artistic ideals in any form, except in one or two singularly favored communities. Our colleges and churches are indeed seeing a new light, but the great financial powers are, if anything, following a retrograde course. Everywhere the architect finds himself engaged in a preliminary—and sometimes losing—battle in defense of the simplest principles of artistic integrity and professional dignity and rectitude. Is it not clear, therefore, that to restore the balance, something more should be done towards general education of the public? In many of the great State universities that are such an enormous power in this country, there are evidences of a movement towards the establishment of schools of architecture. Instead of giving this movement a general approval, let us rather urge efficient and comprehensive departments of the Fine Arts, not for the benefit of specialists, but for the general student body. Let us use such influence as we have towards ensuring the inclusion in this broader curriculum of a proper study of the Fine Arts, not as in themselves examples of intensive specialization, but as an essential part of all civilization, past, present and future; not as technical and historical courses, but in the light of that true philosophy of æsthetics that sees art as an essential part of a well rounded man and of the civilization he creates; as one of the truest tests and exemplars of the history of any peoples and of their contribution to civilization, and as a cultural study that cannot be eliminated from any adequate education. With this as a foundation in any college, the step towards a professional school of architecture would be easy, but in the meantime the good that could be done in the building up of a few centres of artistic appreciation amongst the people would be incalculable, and we cannot too strongly insist on the point that schools of architecture, however good, fail of their full effect unless the men they train find themselves when they graduate and begin to practice, in touch, not with scoffing or indifferent materialists, but with a people needing art to express a best that is really in them, and clamorous for artists of all kinds to do the work; not, in a word, with barbarians, but with civilized men.



CHICAGO RAILROAD TERMINALS.

The announcement, has been quite inconspicuously made in the press of the country, that the Illinois Central Railroad and the South Park Commissioners of Chicago have made a contract which practically insures the carrying out of the plan for grouping the Chicago passenger terminals, is really the most important item of city planning and architectural news which has been given out for some time. It means that the great lake front project can be realized as planned, that Twelfth street, terminating in the vista of the new station of the Illinois Central, will be widened into a nobly proportioned boulevard on which will front new terminals for a dozen railroads, and that there will be undertaken for the whole improvement a total expenditure figured roughly at not less than a hundred millions and possibly far exceeding that amount. With some modifications which are not very radical this will be a realization of an important and well known part of the Burnham plan, and it will lend to Chicago an air of grandeur, and efficiency and beauty, just where these things are now particularly lacking, and where they will be most in evidence to strangers. Chicago has done a number of big things and done them well; but for the most part they are not located where the stranger sees them without making special trips for the purpose or where he gets any benefit from them. The great benefit of the work now to be undertaken will be of course to the people of Chicago, but it will be one in which every stranger may share. It lags not many years behind the Washington and New York improvements in passenger terminals, but in its scope it will far outdo them.

AN ILL-CHOSEN SITE.

The leading editorial in the latest issue of the "Town Planning Review" is a seriously intended, but really rather amusing, account of the artistic objections to the selected site for the King Edward VII Memorial Statue. This site is the Piccadilly end of the Broad Walk in Green Park, London, and it was chosen because it would place the statue in close connection with Buckingham Palace and the neighboring parks—apparently without much thought of the artistic handicaps which the site might involve. The Broad Walk was constructed primarily to afford a vistral view from Piccadilly across Green Park to the Queen Victoria Memorial, and thus it will be exceedingly difficult, to say the least, to put a statue in it without either making the statue markedly subordinate, or else defeating the purpose of the Walk. To be sure, King Edward did have a subordinate position most of his life; but it seems rather rough on him to perpetuate that phase of his career in the Memorial Statue. Furthermore, it is scarcely conceivable that if a statue is raised to him in the Broad Walk it could do else than face the greater statue of the Queen Mother. Any other position would be disrespectful, if nothing else. But in so doing, it would turn its back on Piccadilly, presenting an unfortunate spectacle to the crowds whom it most should interest. And all the time, even at this sacrifice of any pretensions of its own, it would be blocking the Piccadilly view of the Queen Victoria Memorial, which the Broad Walk was designed to insure. The instance offers a striking illustration of the complexities which beset the placing of urban sculpture, lightheartedly as the task is often undertaken.

FOUNDATIONS OF CIVIC ART.

These wise words on civic art are included in a paper by Edward T. Hartman, the secretary of the Massachusetts Civic League. They do not state quite all the truth; but they state much of it which it is well, and sadly necessary, to emphasize: "Beauty cannot easily be engrafted upon rottenness. People are beginning to see that in a town in which every house is of good design and in which maintenance work is carefully looked after there are those elements of art which, when combined, make for a beautiful community. The town of Bournville, in England, . . . is beautiful in all its parts. Civic art has never been heard of there, as a problem within itself, simply beeause it has always been looked upon as an inherent part in the development of the community. The people of Bournville have not had to try to 'graft impossible stone acanthus leaves' upon store-box architecture, upon unpaved streets, and upon neglected backyards. Outdoor art is a part of the construetive work of the community. It is only when we make mistakes in our fundamental work that we have to go back and try to make good by other processes."

CO-OPERATIVE RURAL HOUSING.

Very interesting, while Americans are talking about the improvement of country life, is the arrival from England of some circulars describing a recently formed Rural Co-partnership Housing Association. When one comes to think of it, the development is an entirely natural one. Garden cities and Garden suburbs, which are proving so popular a success beyond the sea, are predicated, for all their garden features, on city life. The well known and successful Co-partnership Tenants' Societies—as Ealing, Hampstead, and Bournville—make use of these city-created communities. There remains the problem of rural housing, and it is not surprising that the plans so successfully appled for cheap housing in the suburbs, should at last be given trial in the country.

Briefly, the society, now fully organized, is designed to consist of a group of tenant members and of outside shareholders, who develop land in the interests of those who live upon it. Tenant members are required to take up at least five one-pound shares, which, however, may be paid for in installments as they pay their rent. Tenants never own their houses, the ownership remaining in the society, for it is held to be often a drawback to a workingman to have a house on his hands for which he must find a purchaser if he desires to move. On the other hand, his interest in the welfare of the society is assured through his ownership of shares. If he moves away, his investment is returned to him, and thus he can leave at short notice. The income on the share capital is limited, so that outside shareholders may not be tempted to "sweat" the land; but any profits that accrue after the payment of the limited interest may be divided among tenant members as a rent bonus. Very interesting also, from a pictorial standpoint, is the statement that it is not desired "to scatter our small holders' houses in isolation in the fields; but rather, to carry out the mediaeval plan of a central hamlet from which the holdings radiate. Men and women, as well in the country as the town, hate isolation, and one of the points on which will depend the success of the Small Holdings movement will be this of the position of the cottages.

TWO INTERESTING TOPICS.

The limit of building height variously imposed by the cities of the United States and a discussion of the construction of public convenience stations are the two striking features of the Fourth Annual Report of Hartford's official Commission on the City Plan. Each is of interest to architects, and the little pamphlet which contains them renders data available which otherwise is not conveniently at hand.

The inquiry as to building height ordinances was undertaken at the request of the Hartford Municipal Art Society. The results are tabulated with some detail, so as to show exactly the restrictions imposed. It is enough, perhaps, to say here that each of the following cities is listed as imposing, in one way or another, a limit beyond which no building in the eity shall be construeted—though towers and spires are sometimes exempted: Baltimore, Boston, Buffalo (outside the fire limits), Cleveland, Denver, Los Angeles, Louisville (outside the fire district), Portland, Ore., Providence, Rochester and San Francisco. The list is not complete, for Chicago at least is omitted; but even as it is, it is very representative and will surprise most persons by its length.

The extended and interestingly illustrated

discussion of public convenience stations is contributed by Frederick L. Ford. It is included in the pamphlet in accordance with the Commission's resolve to include hereafter, in each year's report, a "monograph on some live municipal function, in order that the reports may not only be more interesting to the public, but so that a permanent record may be made of the best practice in each city of handling the numerous and vexatious problems which are continually arising." It would be difficult to think of any phase of the public convenience station, outside of its most strictly technical aspects, which is not covered by this most comprehensive, readable and instructive survey. While American cities were slow to accept the idea of public convenience stations, the movement now has such a hold that the discussion is very pertinent.

ARCADING WITHOUT COST.

Boston is one of the cities which imposes a limit of height beyond which buildings shall not rise. Boston has also some very narrow streets which are sadly overcrowded, and which, therefore, it is desired to widen. The most prominent of these is Washington Street, the principal retail thoroughfare, on which important new buildings are being constructed. Naturally, they are constructed at the street line, and every stone added to their walls makes more difficult the widening of the street. J. Randolph Coolidge, putting all these matters together, has evolved a scheme for widening which the mayor has endorsed as much more practical and satisfactory than the various projects for elevated walks and sub-sidewalks that heretofore have been brought forward. It is said he will ask the legislature to authorize it. In common with many other persons, it appears, Mr. Coolidge believed that the only plan of relief now practicable on Washington Street would be the arcading of the street fronts of the ground floors—an action which means the sacrifice of precious space and which therefore suggested heavy payments for damages. Finding, however, on investigation, that rentals in the upper stories on Washington Street are about one-quarter as much per square foot as on the ground floor, Mr. Coolidge has proposed that the height limit on that street be raised fifteen feet and that owners be allowed to add four times as much space above the present height limit as would be taken for the arcade. Thus, no space being lost by even the exacting measure of values, the street could be widened without injury to the owners and lessees of buildings. In cases with the additional story, as thus proportioned, would no tenesrpth OU5fi cb- portioned, would not present a satisfactory appearance, he suggests that building be allowed over the whole roof area for a license fee which would go far toward paying for the arcading on the ground floor. It is interesting to note that the limitation of building height has unexpectedly, and somewhat humorously, a value in the possibilities of bargaining for the limit's extension; and the plan, thus developed, certainly sounds feasible. Yet this objection, or criticism, is perhaps legitimate. If the existing limit of height was not chosen arbitrarily, but with a regard for the proportion it bears to the street's width and to the capacity of the street, would not permission to add a story destroy that proportion and add a probable increase of traffic so nearly commensurate with the gain in traffic capacity as to counteract most of the relief that the arcading is designed to offer? In street widening, as in most other things, it is pretty difficult to get something for nothing.

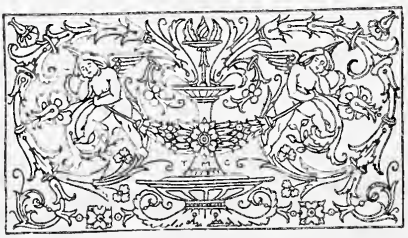
HOUSE BUILDING ON HILLSIDES.

The building of homes for workingmen on steep hillsides is the subject of the November Bulletin of the Pittsburgh Civic Commission. The suggestions are the outcome of two years' study by architects, builders, real estate men and others, who, noting the congestion, excessively high land values and rents in the little level land about the manufacturing sections, have looked with envy on the opportunity bafflingly offered by the unused, steep and unsightly hillsides. The typical Pittsburgh hillside, says the report, is about 50 per cent. grade. It is proposed to build streets along the sides of such hills on grades of from six to eight per cent. These streets will, of course, form a series of terraces up the side of the hill, and it is proposed to vary the distance between these terraces from the width of four houses, 92 feet, to the depth of only a single house, 32 feet. When the distance is 92 feet, it is proposed to build a steplike series of houses, four in a row, connecting street with street. Between the backs of such rows of houses there will be left a space of twenty-six feet, extending in terraces from street to street. At the fronts of the houses, there will be flights of steps, connecting street

with street, and giving entrance at two different levels to each house. The houses are planned to be only one room deep, so that every room opens on a good air space. As, however, the houses are three stories high, each can contain a kitchen and laundry, a living room, two bedrooms and a bath. The end houses can be entered from the regular street; the middle houses from the steps. It is suggested that in going up, the railroad can be left at the upper street; in going down, at the lower, so doing away with any necessity for climbing steps. Where the distance between streets is only 32 feet, the houses would be built in rows, and each house would have an entrance from both streets, such ease of entrance and the exceptional airiness making these houses the most desirable on the hill. Furthermore, it is pointed out that the foundation walls of the houses will be retaining walls for the hill. Those running parallel to the streets will hold back the hill above, while those at right angles will be heavier and will buttress the retaining walls, besides supporting sills and rafters of the houses. It is suggested that the top of the hill be reserved as park or playground. To test the practicability of the plan, for it is absolutely novel, the scheme was concretely applied to a given hill, and with complete success according to the committee's report.

TOWN PLANNING AND ARCHITECTURE.

The "Architectural Association Journal" (England) has published in full the paper which was recently read before the Association by Raymond Unwin, and the discussion which followed it. Mr. Unwin's theme was the place of the formal and the informal in town planning design, and the address contains a number of interesting thoughts. He cautioned the town planning artist against forgetting "the purpose of that which he is creating" and imagining that it is his duty "to create something beautiful which the citizens may with an effort make use of, instead of creating something useful and expressing it in beautiful form." Of course, he remarked, "it is not enough to satisfy the use, and trust that by chance beauty will result." Use and fitness will dictate certain lines of development, but it is seldom in the town planner's work that these will be exact lines; rather, they will usually be limits of deviation, within which the useful purpose requires that he must keep, while in the scope which they afford him as he has the opportunity to produce the beauty for which he strives. "The art," said Mr. Unwin further, "is not complete in itself. The town planner but lays down the general design, creates the opportunities. He must depend upon the architects who come after him to fill in the details and take advantage of the opportunities he has created. He will be able to a greater or less extent to influence the result by determining the position of main buildings, and sometimes by fixing frontage lines and limiting the height and character of the buildings, but at best he must leave all detail out of his count; he can deal only with main masses. It is by the handling of these masses of building and the disposition of the spaces or voids between them, by bringing all the masses and spaces into proportion with each other, and the whole into proper relation to the site so as to produce an organic composition, and by this alone, that town planning can produce its effect." The artistic limitations of town planning, and its dependence on the architect, have seldom had so clear and satisfactory a statement.



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THE ARCHITECTVRAL RECORD

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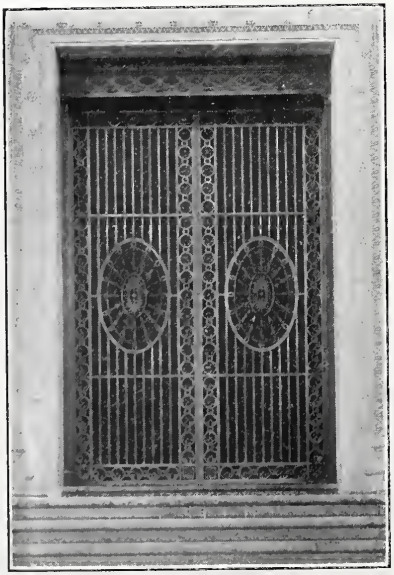
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The artistic excellence of the architect's designs is expressed in the execution of the bronze and iron for the Curtis Building



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Iron & Bronze
Maspeth,
New York City.



"THE LOGGIA"—HOUSE OF HAROLD F. McCORMICK, Esq.
LAKE FOREST, ILL., CHAS. A. PLATT, ARCHITECT

The American Lithographic Co.
Photo by Julian Buckley

THE ARCHITECTVRAL RECORD

MARCH, 1912

VOLUME XXXI NUMBER III

THE RENAISSANCE VILLA OF ITALY DEVELOPED INTO A COMPLETE RESIDENTIAL TYPE FOR VSE IN AMERICA

THE HOVSE OF HAROLD F. McCORMICK, ESQ. AT LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT

PHOTOGRAPHS BY JVLIAN BVCKLY

THE VILLAS AND GARDENS of Italy have excited the admiration of the world for centuries. These villas were country homes, intended for the occasional occupancy of their owners, who, history tells us, were men of large means, of big ideas, of education and culture. They were the expression of social conditions of the age in which they were developed. The owners of these villas brought with them to the country all the civilization of the city together with that desire for artistic attainment which their culture demanded.

As a consequence we find that the Italian villa included not only the casino or dwelling place and the other necessary buildings, but the park with its gardens, terraces, fountains and pavilions as well. These parts were arranged to give the fullest opportunity for the enjoyment of the various pleasures of country life and to reveal at every turn the beauty of the landscape.

The Italian villa of the Renaissance has come to have a peculiar value as an architectural type under contemporary American conditions. We find to-day, a large number of our countrymen who in many respects can be favorably compared to the owners of the past. Conditions seem to be repeating themselves in the desire of our more fortunate citizens for life in the country. It is a characteristic of Americans to know what will best meet their requirements. We seem to show a power to assimilate ideals, traditions and forms which are not native to the soil. It can not be said, however, that in the act, we lose any measure of originality. It is that freshness, life and color imparted by the sympathetic use of historic models which is giving propriety to our designs.

In the March, 1904, issue of THE ARCHITECTURAL RECORD, we called attention to the part Mr. Charles A. Platt has taken in making the Renaissance villa a complete residential type. It now remains for us to study one of the most recent examples of this development.

The Harold F. McCormick house at Lake Forest, Ill., has given Mr. Platt an unusual opportunity to realize one of his early aspirations, that of working freely in the style about which he is so enthusiastic, a style which has not been undertaken by many of the American architects, notwithstanding its appropriateness for the large American country house.

Conditions at Lake Forest, Ill., situated on the shore of Lake Michigan, were most favorable for the location of just such a house.

The same excellent judgment that prompted the architects of the Italian villas in the selection of the site, the ingenuity with which every natural advantage of the place was made use of and the skill with which the designer has disposed the various parts to form a charming whole, disclosing new surprises and unexpected delights at each turn, has been shown in the McCormick plan.

The McCormick property consists of many acres with a large frontage upon the lake. The ground rises abruptly from the water to the court terrace level: a height of seventy feet. The house has been placed on the edge of a heavily wooded bluff overlooking the Lake and the surrounding country.

As one turns into the grounds from the highway the house is to be seen terminating a broad drive. This drive divides as the house is approached, making a splendid lawn before the entrance.

One does not realize that they are in such close proximity to the lake as they approach the house through the wooded drive. It is not until the house is entered, and passed through, that the wonderful glimpse of the water comes to one as a complete surprise. Upon a sunny day it is hard to believe you are not sojourning in Italy itself with the blue waters of the Mediterranean sea at your feet.

So it will be seen that the buildings are so placed that there is a progression, artistically managed, from the unconfined naturalism of the forest park to the strict formality of the grounds which immediately surround the dwelling. We include among our illustrations a general plan which is well worth careful attention.

An architectural feature has been made of the Lake approach which has been cut through the trees opening up a full view of the water from the court terrace. We show the design for this scheme on page 223. The Italian method of making a feature of this avenue is not lost sight of. Fountains, pools and cascades are included with embellishments of statuary at the different terrace levels. A bath house has been worked in at the lowest level. This opens onto the swimming pool.

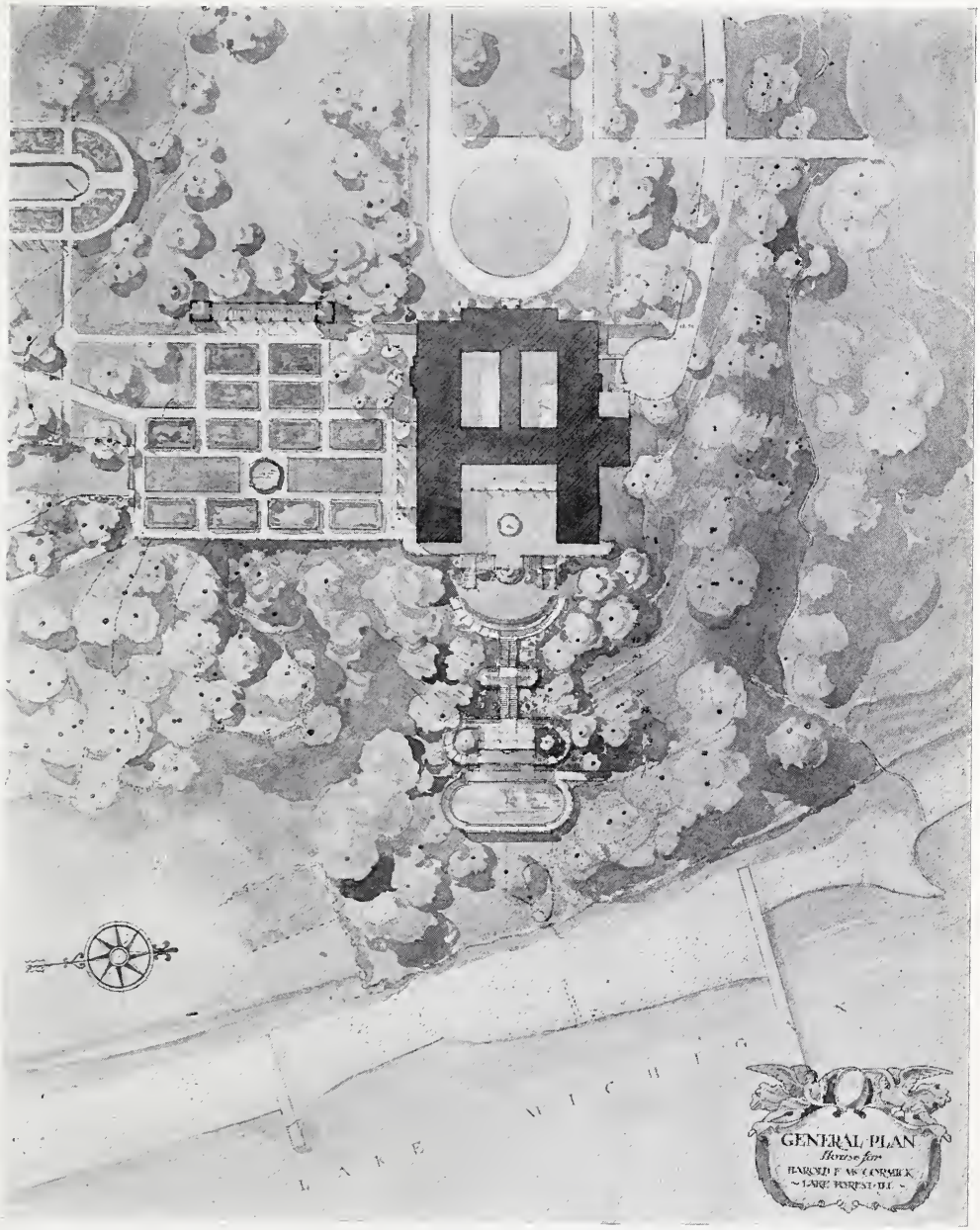
The house was originally less than half the size that our illustrations show it. The East (Lake) front remains unchanged. The addition was made on the West (entrance) front by adding all the rooms shown on the plan west of the staircase. The form of this addition was dictated by the width of the promontory on which the buildings are located. It would have been impossible to enlarge the house on either the north or the south ends.

Fireproof construction throughout has been used. The house is built of brick covered with a nearly white cement stucco. All the trimming and ornamental features are of limestone. The roof is concrete, covered with red tile.

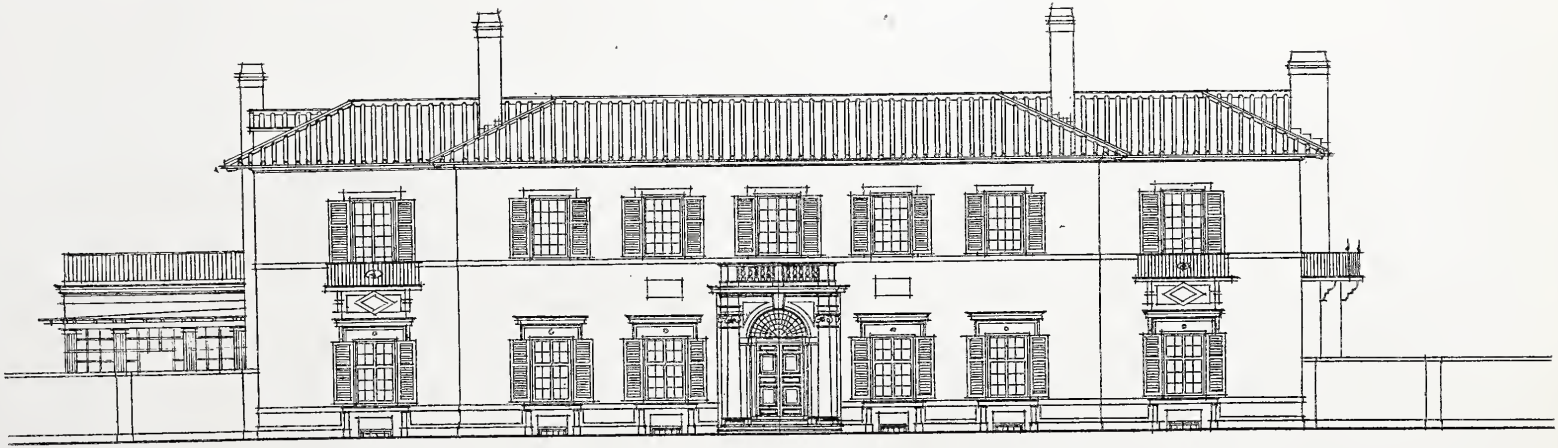
The cornice is particularly interesting in detail and color. It gives another touch of the Italian influence with its weathered brown brackets with the panels between decorated in blue and gold.

As one enters the house he finds himself in a wide entrance hall, stone lined with an interesting carved wood ceiling. From this hall a barrel vaulted corridor extends through the house to the Loggia and court terrace. Our frontispiece pictures in a most attractive manner just what can be expected upon reaching this loggia. There are unrestricted vistas in three directions.

On either side of the corridor are the



GENERAL PLAN—HOUSE OF HAROLD F. McCORMICK AT LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



THE WEST ELEVATION OF THE HAROLD F. McCORMICK HOUSE AT LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



ENTRANCE DETAIL—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.

Open Court and the Fountain or Pompeian Court. Both of these courts have been treated as architectural features, as will be seen by the illustrations.

The library and dining room overlook the lake and open upon the loggia and court terrace. Photographs of all the rooms are shown among the following plate illustrations.

Special attention should be called, however, to the drawing room with its walls of Formosa marble. Instead of the garish and cold appearance so often associated with marble as a wall covering, this room is of a color and warmth which makes the room most livable. The floor of this room is teak. Throughout the remainder of the house the floors are marble or terrazzo.

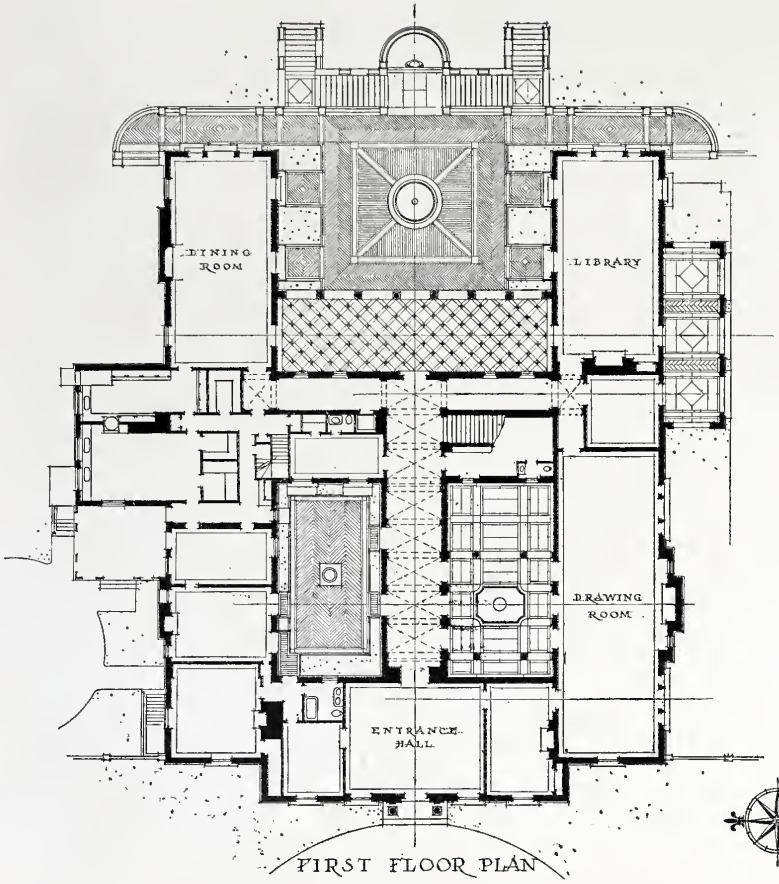
The dining room and the library are paneled in Italian walnut with painted ceilings. These ceilings add to the many interesting features.

The McCormick house is one of three that Mr. Platt built at the same time on the shores of the Great Lakes, the Mather house near Cleveland, which The Architectural Record published in November, 1910, and the Alger house situated on Lake St. Clair.

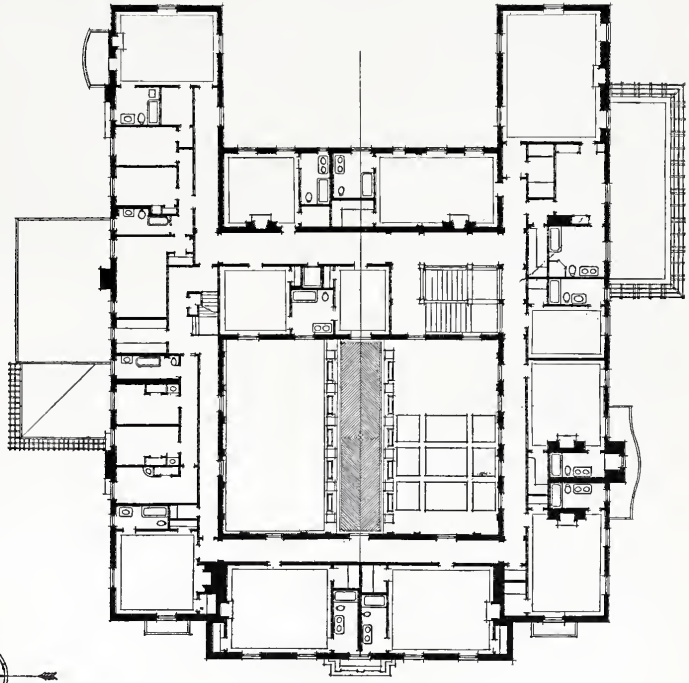


Fountain and Garden Detail.

THE HOUSE OF HAROLD F. McCORMICK, ESQ.
Charles A. Platt, Architect.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

PLANS OF THE HAROLD F. McCORMICK HOUSE, LAKE FOREST, ILL. CHARLES A. PLATT, ARCHT.



THE EAST ELEVATION OF THE HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



TERRACE AND LOGGIA—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



GARDEN ELEVATION—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



GARDEN ELEVATION—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



DETAIL OF SOUTH FRONT—HOUSE OF HAROLD F. McCORMICK, ESQ. CHARLES A. PLATT, ARCHT.



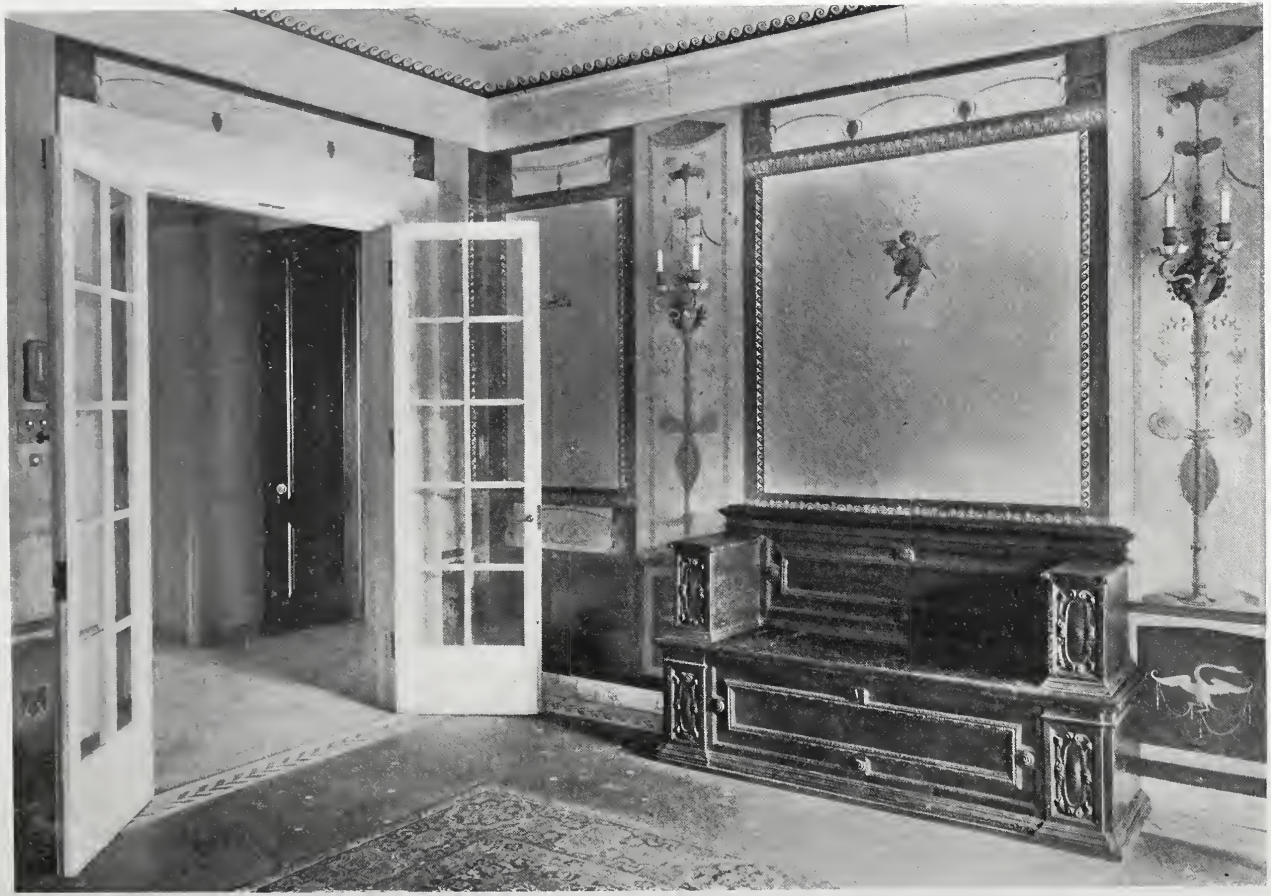
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THE SOUTH COURT—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT



DETAIL OF TERRACE FOUNTAIN—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



ENTRANCE FROM GARDEN VESTIBULE—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



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THE LIBRARY—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



THE DRAWING ROOM—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.



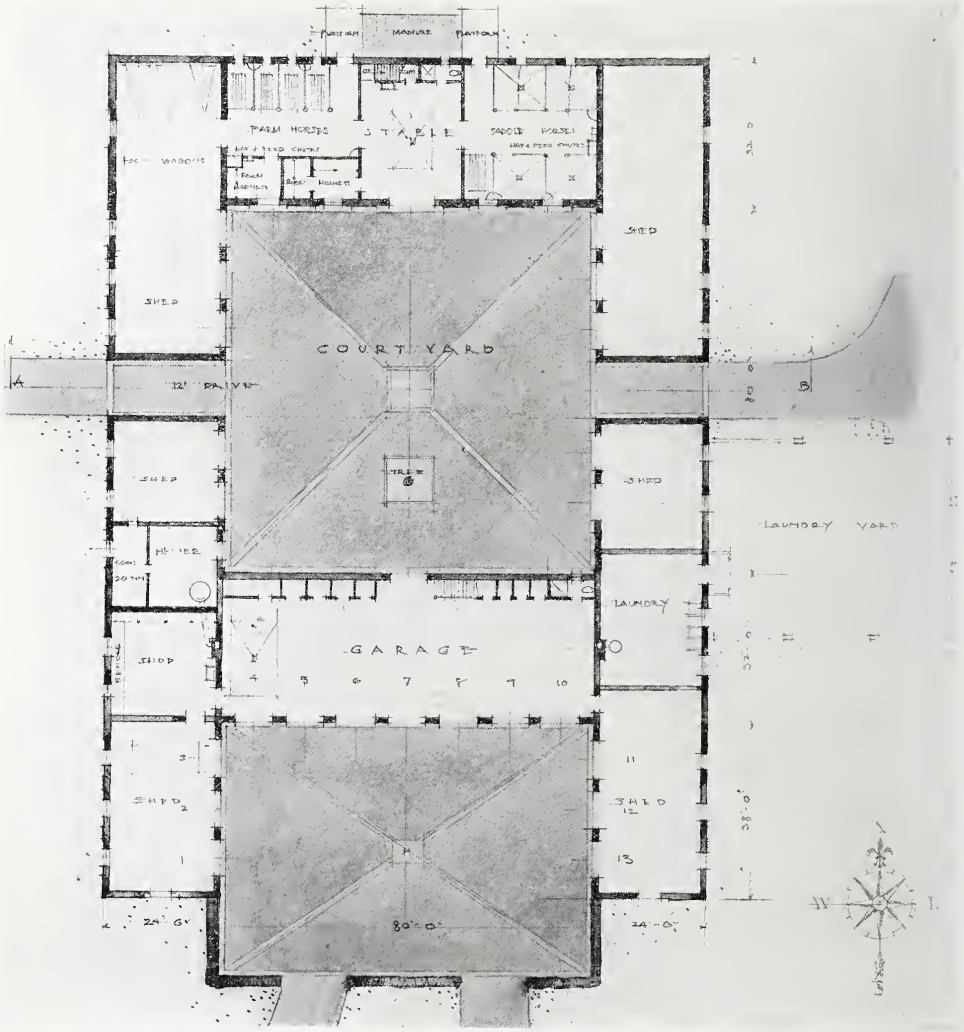
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DETAIL OF LIBRARY MANTEL—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHT.



AVENUE FROM THE LAKE—HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHT.



PLANS FOR THE STABLE AND GARAGE FOR HAROLD F. McCORMICK, ESQ., LAKE FOREST. ILL. CHARLES A. PLATT, ARCHITECT.



SECTION



ELEVATION A-B

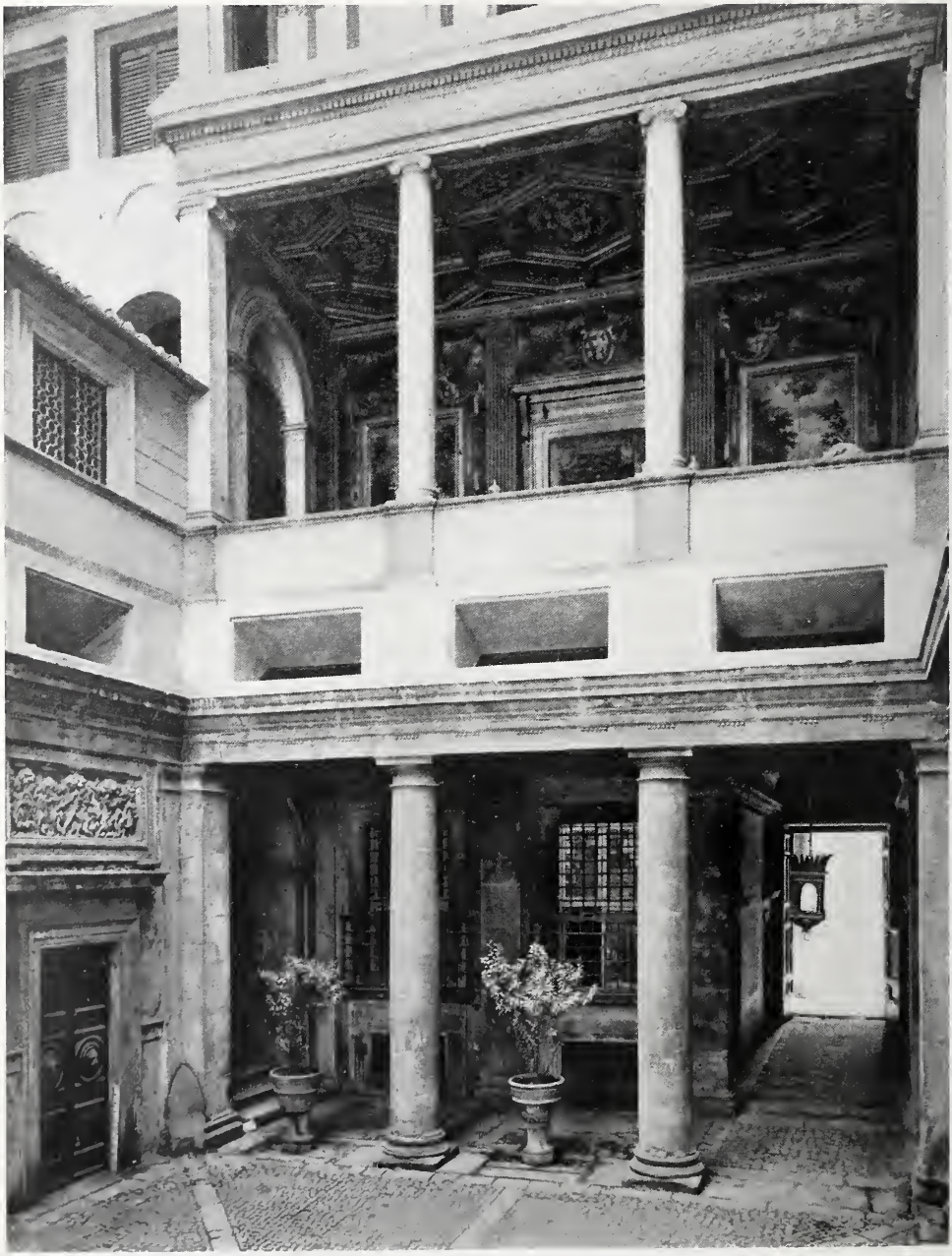


WEST ELEVATION



SOUTH ELEVATION

ELEVATIONS FOR THE STABLE AND GARAGE FOR HAROLD F. McCORMICK, ESQ., CHARLES A. PLATT, ARCHITECT.



THE COURT OF THE PALAZZO MASSIMO.
BALDASSARE PERUZZI, ARCHITECT.

THIS MOST EXCELLENT MASTER



BALDASSARE PERUZZI



BY M. STAPLEY

PHOTOGRAPHS & DRAWINGS BY A.G. BYNE

VASARI IN HIS CHAPTER on Baldassare Peruzzi remarks in his quaint moralizing way: "Among all the gifts which Heaven confers on mortals there is none which can be, or justly ought to be, held in higher esteem than elevation of the mind with quiet and peace of soul." This is Vasari's way of telling us that Peruzzi was a shy, reticent, self-communing man who gave but little time to his friends. The matter is put more brutally by another contemporary as "the simplicity and faint-heartedness of Peruzzi," which words caused Milanesi in 1880 to lament "that anyone should call that an awkward faint-heartedness which was indeed the extreme delicacy and true modesty of this most excellent master."

Extreme modesty and delicacy then let us call it; but, by no matter what name, we regret that it prevented the fullest scope of Peruzzi's unquestionably splendid talents and caused him to shrink under the more assertive and powerful personalities of Michael Angelo and Raphael. The record of some fine wrangle, bitter or friendly, among them over their work (for they were often employed together) would give us an inner glimpse of our man; but Peruzzi never quarreled; he excited no strong hatreds nor loves; save for the suspicion that he was poisoned by a rival jealous to supplant him as director of St. Peter's, there is no hint of any enmity. As for the poisoning, tradition has allowed scarcely any great man of the period to die a natural death; and as for the friendship men bore him, its evidence came too late—as for instance when the Pope sent money to his deathbed, or when his pupil Serlio, who published "The Five Books of Architecture" in 1551 said in introducing the Fourth Book: "For all you will find here to please you, do not give praise to me, but give it well to my predecessor Baldassar Peruzzi of Siena, who was not only very learned in this art, but was also courteous as well as liberal in instructing those who were interested, especially me, which recounts to his benignity." There are other contemporary tributes to Baldassar's nobility of character, but this nobility never served to endear him to his colleagues, else they would not have left him to die in poverty and misery.

Though we know little of the inner man Peruzzi we find that his life was not without some striking incidents. "Then came the year 1527," writes the gossipy Vasari, "and in the cruel sack of Rome poor Baldassar was made prisoner by the Spaniards and not only lost all he possessed, but was also maltreated and shamefully tormented; for having a grave, noble and commanding aspect, they believed him a great prelate disguised, or some other man who could pay a large ransom. . . . . Then Baldassar, having escaped from their hands, took ship for Port Ercole and thence to Siena, but on the way was stripped and robbed and arrived in Siena in his shirt. Nevertheless he was honorably received and clothed and appointed to superintend the fortifications of the city." We find that soon after these narrow escapes he was before the walls of Florence as engineer, helping the Papal and

Sienese army to subdue the city. But it is not recorded that he ever mentioned these events as things worth remembering, nor that he ever discussed the well-known manner in which several of his patrons imposed upon him. It was to him as if his life were without incident; and we can only conclude that his genius so possessed him that he remained indifferent to life's vicissitudes. Yet all his years he did much journeying up and down Italy with more or less adventure, and left in the north and the south architecture and painting that place him in the first rank of the Cinquecento.

Through study of these we find Peruzzi's pre-eminent quality to be an exquisitely refined taste. As an architect no man ever worked in a greater variety of materials or styles; but whether he concerned himself with small bricks in northern provincial Italy, or big blocks of classic marble in the Eternal City, he infused into each his own delicacy. An organ for Santa Maria della Scala, a little villa for the Turchi with its terra cotta cornice that is almost Greek, or a magnificent palace for the Massimi, all are as recognizable to the architect as Van Dyck's burgomasters and courtiers are recognizable to the painter, and for that same ineffaceable stamp of personal elegance in the author.

Peruzzi's birthplace was most probably Siena, and the date probably 1481. Other towns claim him, but he always signed himself *Senese*. His father was a weaver (and not a nobleman as Vasari claimed), who moved to Siena from Volterra and placed his son with a goldsmith. This had always been, in the earlier stage of the Renaissance, the first step in the development of talented boys; and whether later these became painters, sculptors or builders, they acknowledged through all their works their early training. Orcagna's canopy over the Virgin's picture in Or San Michele in Florence, rich with statuettes and precious stones and small reliefs, proclaims itself immediately as a piece of *orfèverie*, to mention but one example. But at a later day, when Florentine boys who were to become painters worked with painters, and future sculptors with sculptors, the old practice of learning from the goldsmiths still prevailed in Siena, so that Baldassare Peruzzi is one of the few masters of the High or Late Renaissance who had this early training.

It was soon followed by another branch, however, for he worked as Pinturricchio's assistant when this master was painting the Chapel of San Giovanni in 1501. In fact, as Siena was then building her Duomo, an impressionable, eager youth might have found a dozen outlets for his talents. Soon after helping on the San Giovanni fresco he went to his father's town of Volterra to paint a chapel, and there met Peter of Volterra, who was about to return to Rome where he had been painting in the Vatican for Pope Alexander VI. To Baldassare, as to other Tuscan artists, the magic name of Rome stood for the far-off brightness of his dreams. The popes, after having left the Eternal City in long desolation, had lately returned to it and were seeking, by lavish expenditure, to make up for their previous neglect. Every provincial burned for a share in this great work; and so on the day of young Piero's departure, two painters instead of only one tramped foot and soul out of Volterra on the long southward road to Rome.

Years before, back in Siena, architects, sculptors and painters had long wavered between the art of the Middle Ages, and that of the Renaissance which their hated, yet envied neighbors, the Florentines, were so ardently developing. This struggle had gone on throughout the Fifteenth Century till, towards its close when Baldassare Peruzzi began his studies, Siena, too, had come under the seductions of the New Art. But it was a more moderate manifestation of Renaissance than at Florence. The Sienese were always fine rather than forceful; they caught more of the grace and distinction of the new movement, at the same time reconciling with it the deep religious mysticism which had so penetrated their own peculiar Gothicism. This naive version of

the Renaissance was, then, the influence which had been working on the sensitive young goldsmith and painter who was traveling south to stand in awe before the powerful, almost brutal, buildings of the old Romans. If in Siena, he had been thrilled at sight of the few antique fragments there, what must have been his emotions in presence of the Pantheon! He never voiced them, but we know by the course he took that it showed him he could tell a bigger, broader, more human message than could ever be expressed by little silver statuettes of saints, or by painted frescoes in dim chapels. It decided him to become an architect—and a great architect.

And so while decorating the choir of San Onofrio (his first commission in Rome) and later the Chapel of Santa Rocca and the fortress of Ostia, he made time to study and measure Roman monuments, to translate and make a commentary on Vitruvius, to study mathematics, astrology, and perspective, and to commence a book on the antiquities of Rome. In order to illustrate this book he made the numerous drawings which came later into Serlio's possession and which he used in the "Fourth Book of Architecture" mentioned. And all this while the young Peruzzi kept dreaming of the great palaces he would some day build.

During these studies he had been helped financially by his townsman, Agostino Chigi, one of the wealthy aristocrats that the munificent example of the new pope had brought to Rome; and it was from this Maecenas that in 1509 he received his first architectural commission—to build the beautiful villa now called the Farnesina,* of which



PALAZZO POLLINI AT SIENA, ITALY.
Baldassare Peruzzi, Architect.

*Baron Geymuller in his "Study of Raphael Sanzio as an Architect" has tried to give to his favorite the glory of this exquisite palace; but his arguments have been rejected by all other critics, who insist that it is unmistakably Peruzzi's.

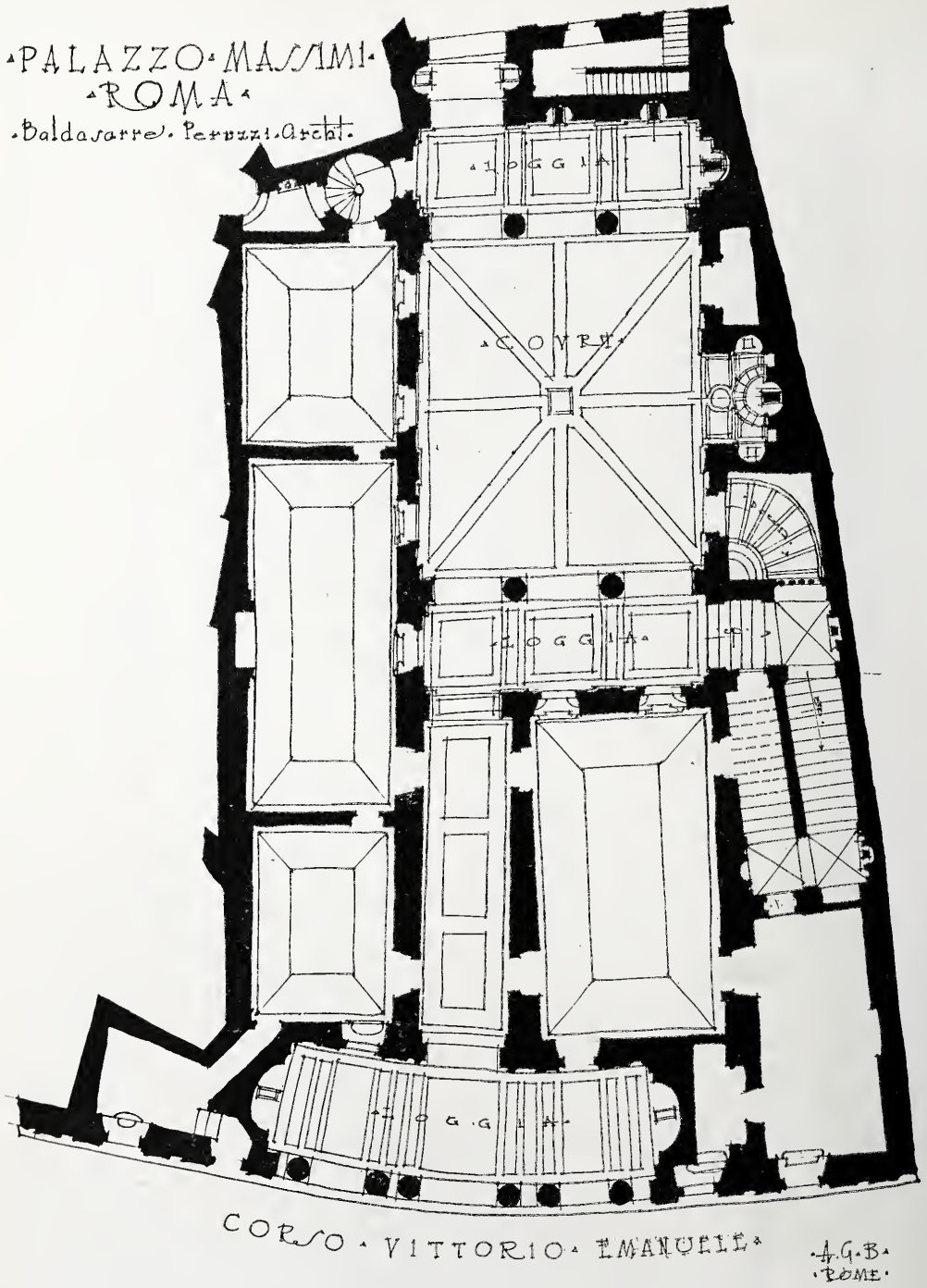
Vasari wrote that it was "born, created by a breath, not built." The Farnesina was finished in 1510—or possibly 1511—and from then on till the bleak January day in 1536 when they laid him beside Raphael in the Pantheon, Peruzzi's life was the life of a great architect, producing in rapid succession works of imperishable fame. After Bramante he was the last *harmonist:* like him he used the most elementary forms and motifs; *unlike* him, he gave to these life and color. Profound though his grasp of the antique was, nowhere in his productions is there any trace of the dry archæologist. A façade by Peruzzi *sings* with the joy of a new born thing. No building but has some distinctively original touch. In the Farnesina he pierces the frieze with windows, a motif that ever remained a favorite one with him, and was copied even to the cupids and festoons by Sansovino in St. Mark's Library at Venice. In the battering basement of the Casa Pollini he adapted his own walls and bastions just constructed for the defense of Siena. From his plan for the Rocca di Caprarola (which was long erroneously assigned to Antonio da San Gallo the Younger) Vignola got the idea for his famous pentagonal villa. From his theatre curtains with their palaces, streets and bridges painted in deceptive perspective, Palladio got inspiration for his Vicenza theatre. So it is, all through, that we find proofs of his ingenuity. Of all the great ones of the first third of the Sixteenth Century the "faint-hearted" Baldassare Peruzzi shows the most striking independence of treatment as well as the most subtle elegance and refinement.

Ignoring several early excursions into the provinces in his capacity as architect and painter, and commencing with Rome, two of Peruzzi's palaces, the Farnesina and the Massimo each a *chef d'oeuvre,* would be sufficient on which to rest his fame. The former (whose plan may be seen in the Uffizi) is an oblong having on the garden side two wings with a loggia between. Nothing could be simpler; yet no one had done it before. The loggia, the broad fenestration, the symmetry, are all a departure. The window-pierced frieze and the bold, admirably proportioned cornice are also innovations—the latter seeming to leap centuries ahead of Bramante's timidly felt, insufficiently crowned *Cancelleria.* Reclining figures in the spandrels of the arches, a motif long unused, reappear in the Farnesina to be used ever after. In fact, throughout the palace, one sees that its architect felt a modernity in Roman architecture unfelt by others, and that he passed it on to us to be a lasting influence. Yet this fresh, delightful creation for Count Chigi is almost dry—*troppo seccho,* as Monaldini puts it—compared with the master's later work. In the Farnesina the orders are used throughout; but later he discards them as too stereotyped save for entrance porticos.

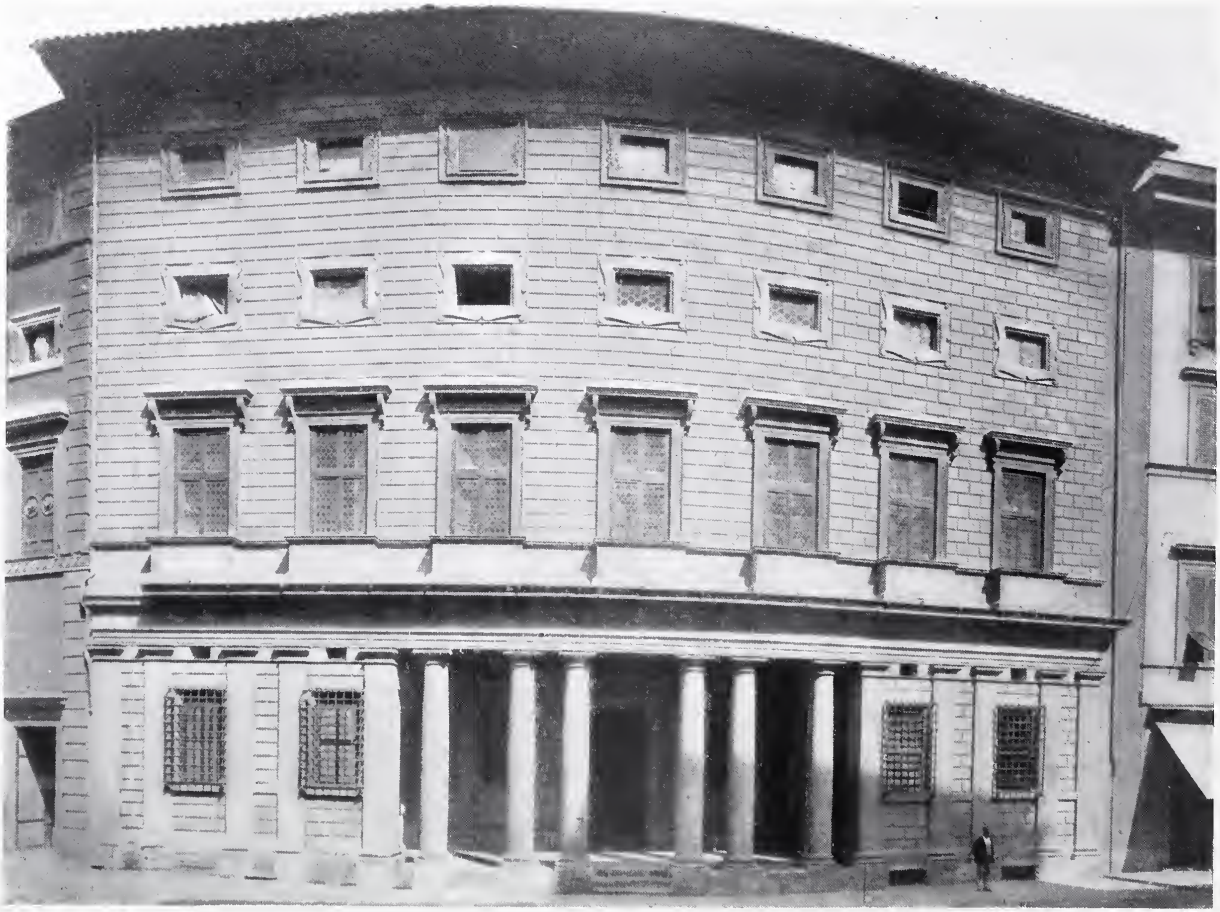
This breaking away would alone suffice to account for much of his originality. Given a broad palace façade to be made interesting without recourse to the orders, an architect must use not only ingenuity, but rare taste; but Peruzzi had set himself a problem within his capacity; before he was thirty he had left the orders behind to those of his colleagues who needed them more. Our illustration of the Villa Farnesina does not, unfortunately, show the best side overlooking the garden; nor have we any photographs of the frescoes with which Peruzzi, along with Raphael, decorated the interior. But Rome is only ten days' distant, and an architect has only to present his card at the Farnesina gate (and a grateful *pourboire* to the porter) to get inspiration that no photo could give him. And as the visit will at once make him an enthusiastic admirer of Peruzzi the painter, as well as of Peruzzi the architect, he will be sure on returning from this Trastevere trip, to visit that little church of which Arthur Symons has written: "I am never tired of the *Pace,* the Church of Peace, which nestles against the *Anima,* the Church of the Soul, in a poor central part of the city. And it is not for the Sybils of Raphael, admirable in grace of invention as they are that I go to it, but for the frescoes of Baldassare Peruzzi on the opposite wall, with their



PALAZZO FARNESINA AT ROME, ITALY.
BALDASSARE PERUZZI, ARCHITECT.



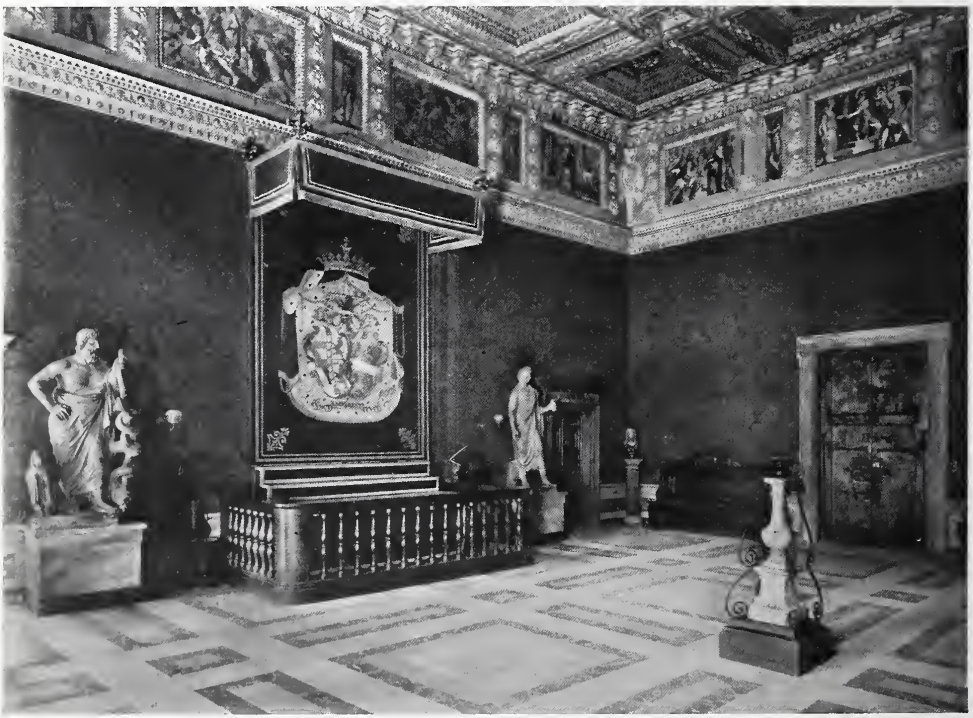
FLOOR PLAN—PALAZZO MASSIMO,
BALDASSARE PERUZZI, ARCHITECT.



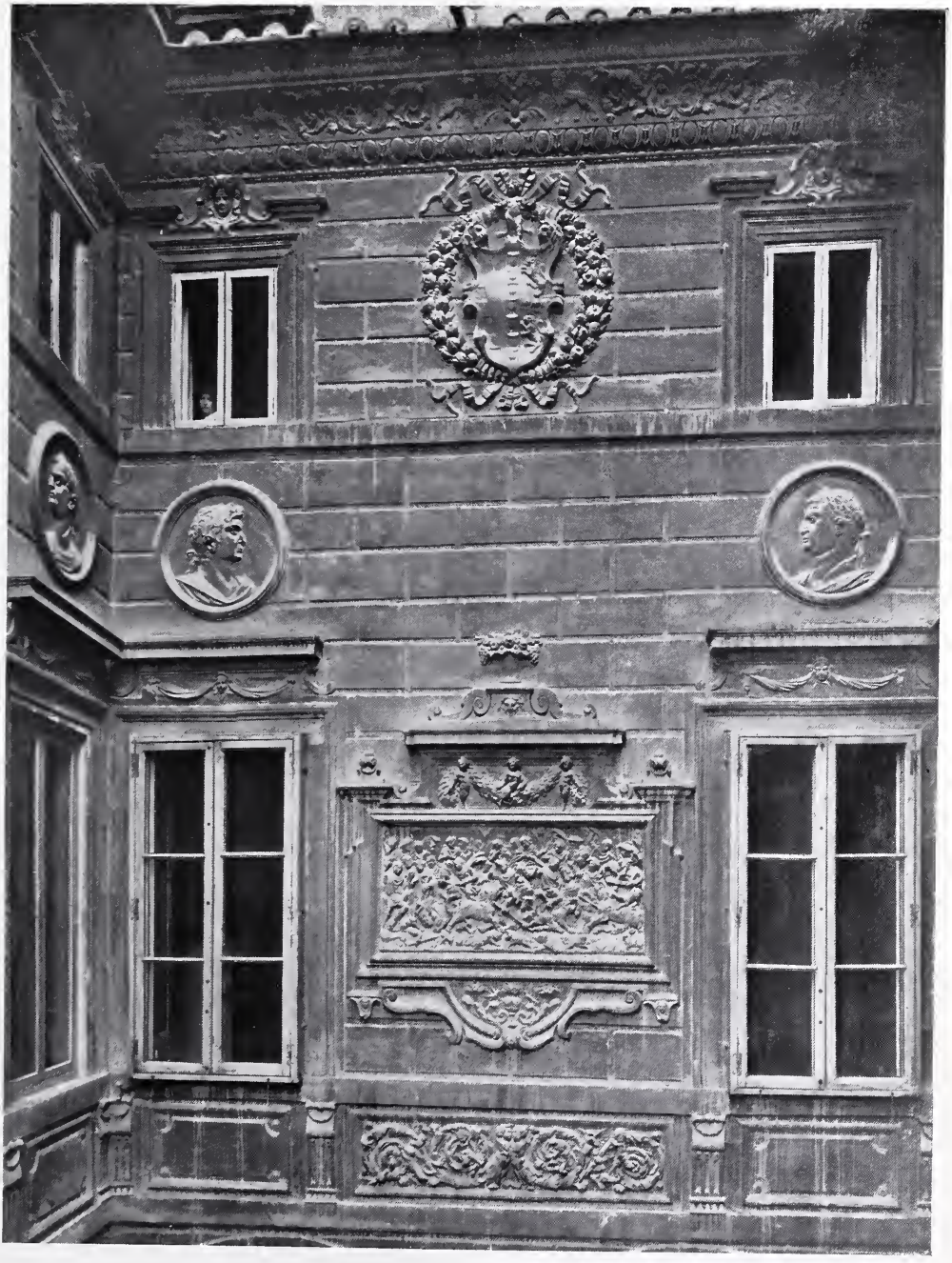
PALAZZO MASSIMO.—ROME, ITALY.
BALDASSARE PERUZZI, ARCHITECT.

strength, their gracious severity, their profound purity."

Nearly a score of years after his Farnesina début, Peruzzi built in Rome his more noble and better known *pallazo*, the Massimo. Into this masterpiece he transmuted the swarming ideas and experience of the intervening crowded years—years that had enriched Rome, Siena, Bologna and other cities with the fruits of his genius. It has been said of Leonardo, and for that matter of many another artist, that he "never worked till the happy moment came—that moment of *bien-être* which to imaginative men is a moment of invention." Can it be then, that for this quiet man who "had no personality as a man, but only in his work" every moment was a happy one? It would seem so, since surely every moment was one of invention. The materials and styles and kinds of buildings by which he had been expressing himself between the Farnesina and the Massimo are of extraordinary variety and in every instance he dexteriously bends materials and all the exigencies of the case—such as an irregularly shaped site or a site of several different levels—to his own artistic ends. The little Casa Pollini in Siena is simply and frankly truncated to accommodate the intersection of the Via Baldassare Peruzzi with a steep lane; the lower moulding is continued in the high wall of the raised garden, above which rises a great loggia of several stories; good proportions, good brickwork crowned by a rich terra cotta frieze modestly withdrawing itself back under far projecting eaves, and we have one of the most refined and dignified houses in all Italy. Nearby is another simple brick and stone house, the Turchi, with shallow eaves and a frieze, and with architrave and cornice almost Greek in their refinement. Then out beyond, magnificently overlooking the city from its hilltop, is his Villa Belcaro, half castle, half Tuscan farmhouse, with its curiously interesting "landscapery," following closely his plan for it that is in



PALAZZO MASSIMO.—THE ENTRANCE HALL—BALDASSARE PERUZZI, ARCHITECT.



PALAZZO MASSIMO. — ROME.
BALDASSARE PERUZZI, ARCHT.



MURAL IN THE CHURCH OF FONTEGUESTA BY BALDASSARE PERUZZI.

the Uffizi. The hillsides around are thick with pines, and close against the high wall enclosing the house is an unbroken line of cedars. The top of the wall is a paved promenade as on old Roman walls, and from it one looks down into the courtyards and across the garden to the beautiful loggia or summer house whose ceiling is our architect's finest bit of painting. Quite a different note is struck in "Peruzzi's Wall," as they still call the Sienese fortifications, for these set one thinking of old Egyptian gateways. The wall and the four city gates still standing out of the seven he built, represent his services as "architetto publicco" at five crowns a month. But while earning this he was busy in other works. Santa Catterina's Court and Cloister, the High Altar for the Duomo, and the capricious and remarkably beautiful organ he designed for Santa Maria della Scala, and whose motifs he went back to again and again for every conceivable purpose, helped along with the residences mentioned to fatten the five crowns a month.

In Bologna, whither he had been invited to make plans for the church of San Petronio, we again get more than the initial project, or rather, in this case, *other* than the initial project; for San Petronio was never built—thus depriving us of the chance to see how Peruzzi would have succeeded with the extraordinary Gothic plan and complete working drawings still shown in the sacristy—but his visit left Bologna enriched by several other works that formed important episodes in the city's art history. The most striking of these is the Albergati Palace. Tranquil, noble, it seems to have the grand rhythm of majestic music. Its vast wall area with a minimum of void imparts an impressiveness which is augmented by the battering base. The excellent proportion and disposition of the fenestration are so well known to students as to overshadow the claims of the very original detail which is a curious mingling of classic and Egyptian. As the Albergati stands, it



MURAL IN CHURCH OF SANTA MARIA DELLA PACE BY BALDASSARE PERUZZI.



PALAZZO ALBERGATI AT BOLOGNA, ITALY. BALDASSARE PERUZZI ARCHT.

is but half of Peruzzi's scheme; but it is no tax on the imagination to see it, completed, the stateliest palace ever "built of squarèd brick."

In Rome, besides private patrons, the Popes kept him busy (for Peruzzi saw some seven of them succeed to the papal chair). He was entrusted with chapels, with papal tombs, papal casinos, and finally with the supreme honor St. Peter's itself. As architect of St. Peter's, where he had been preceded by Bramante and Raphael, he found matters much tangled in their change from Bramante's equal-lengthed nave and aisles grouped around a central cupola to Raphael's simpler and very beautiful Latin cross. Besides the problem of the plan, he was confronted by foundations and piers inadequate to even the still meagre superstructure; several piers having already crumbled, his first task was to strengthen them—a business which cost much thought and brought no glory. Next, feeling that as a matter of good engineering the dome should rise from the existing foundations, he returned to the more symmetrical Greek Cross and drew the finest plan yet conceived. Had this splendid scheme been carried out Peruzzi's consummate taste would have made it one of the most magnificent structures in the history of architecture, and the Renaissance, too, might have boasted of a Parthenon. But it was immediately after Peruzzi's plans were finished that the vascillating Clement VII brought the wrath of Emperor Charles V upon his head with the destructive consequences previously mentioned — Rome pillaged and the architect of St. Peter's taken prisoner. The coveted opportunity of continuing the Basilica never came to him again. But it was after these years so ill-starred for Rome (and so profitable for Siena so far as Peruzzi's services are concerned) that he returned and, while waiting for the Pope to take up the question, erected on the



HOUSE OF S. CATERINA NEAR SIENA.—BALDASSARE PERUZZI, ARCHITECT.

ruins of their battered-down abode a new double palace for the two Massimo brothers.

And now finally let us examine this last great work of the master. The conditions were singular; he must for economy's sake, use what he could of the ruins on a lot facing a great bend of the street (now the Corso Vittorio Emanuele) and running into further irregularities at the back; he must plan two separate residences into one seemingly large palace, and this palace was to be modeled after that of Fabius Maximus at Pompeii, for the old Roman adversary of Hannibal was the ancestor of the present family; furthermore their full Italian surname, *Massimi del Portico,* later changed to *Massimi delle Colonne,* must be expressed on the façade. How the architect penetrated with his customary quickness and ease into every one of these exigencies and converted each into some striking attribute of beauty can be seen in the plan and the façade illustrated. Take for example the arrangement of the *colonne;* to couple columns is ordinarily not a practice to be recommended; but Peruzzi, by placing both pairs under an unbroken solid that rises through three stories, and by bringing their outer limits exactly in line with the extremity of the windows, makes their doubled strength seem a necessity and at the same time makes them hold his composition together. His *portico* and *colonne* are the most salient feature of a severely beautiful façade.

From a courtyard (which though small is the finest in Rome) leads a staircase absolutely unpretending; when one has mounted it he is in the charming *loggia* of the *piano nobili* under the gold and reds of a richly coffered ceiling; from here he passes direct into the *grand salon,* with its magnificent frieze. The scenes Peruzzi has painted here from the life of the Roman general could not fail "to emotion" one into respect for such an ancient pedigree; but an architect would be more interested in Peruzzi's decorative innovation—the fact that the broad ornamental frieze usually placed above the cornice has been brought down between it and the architrave, thus expanding the entablature into twice the space it would occupy if classically correct. This has been followed ever since in interiors, but Peruzzi used it as often on exteriors, for he seemed to have an aversion for literally copying any detail from the ancients. Throughout the decoration Greek and Roman are in close fellowship, but always dominated by Peruzzi's individuality.

But it is in the planning of the Massimo palace, more than in its decoration, that Baldassare Peruzzi is peculiarly sympathetic to moderns; nothing medieval is left in it. With the passage leading to the *cortile* so deftly on axis with the entrance loggia, and all unevenness that would have interfered with his classic treatment so subtly taken up in the thickness of the walls, with a maximum of façade windows and the height of upper stories diminished to present day usage; with sunlight everywhere, the Massimo is the first instance of that modern balance demanded between architectural requirement and comfort for the inmates. Refinement of detail is everywhere apparent to proclaim him a great artist; but his premonition of a sort of planning not really to be established till many years later proclaim him a profound thinker—betray his leading instinct, his initiatory ideas as to the lines on which future domestic life would settle down.

Besides being "the most elegant painter among the architects and the most ingenious architect among the painters" Baldassare Peruzzi gave himself to several minor activities that add to our interest in him. Like Leonardo he became a celebrated designer of pageants and made the coronation of Clement VII the most gorgeous fête Renaissance Rome had ever witnessed. Long before this he had undertaken the staging of Cardinal Bibiena's "Calandra" played before Leo X. It was the first drama written in Italian and Peruzzi, as if its modernity was breath to his nostrils, threw his whole heart into devising a modern setting for it. He painted realistic contemporary scenes and further worked out the



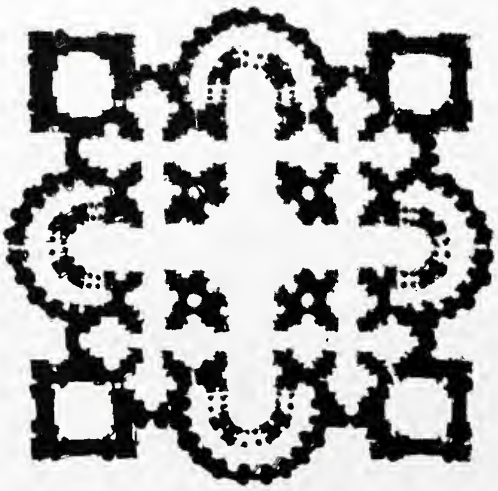
CASINO OF THE VILLA FARNESE AT CAPRACOLA. BALDASSARE PERUZZI, ARCHT.



ST. IN BOSCO, BOLOGNA, ITALY.
BALDASSARE PERUZZI, ARCHT.

mechanism for shifting them, thus giving us the earliest movable stage scenery heard of. This really amounted to an invention and one we have never since learned to do without. Scene-painting, inaugurated by an artist of such high rank as Peruzzi, soon attracted the most talented men in Rome; just as, years later, after the Italians had introduced the theatre into France, it called on the talent of Watteau and Boucher. But Peruzzi as initiator of the modern theatre had carried his work farther than merely scene painting, and had designed stage costumes and furniture as well. Then, like Raphael and Mantegna who had been associated with him in the diversion just mentioned, he made cartoons for the tapestries that rich Italians, following Pope Leo's lead, were having woven in Flanders. One of these cartoons, for a tapestry now in the Vatican, is in the collection of Prince Sigmaringen. It is an Adoration of the Magi; not, however, the one in the London National Gallery. This latter is a rich composition of forty or more figures quite beyond Peruzzi's customary restraint, and was engraved by Caracci in 1579. But all these more fugitive manifestations of his versatility were lost or destroyed when the Constable of Bourbon, "enemy of God and man," as Vasari calls him, led the Spanish troops to the memorable and terrible sack of Rome.

We are glad that out of the havoc made by them it was permitted to Peruzzi to raise a great and mature monument to his fame. Soon after completing the Palazzo Massimo he died, worn out, it would seem, like any ignoble toiler of the soil, by the mere struggle for existence, still comparatively young —fifty-five or six—leaving behind him an output staggering in quantity, variety and excellence—and brimming with the pathos of having been inadequate to keep its author from poverty and misery. *Virtus laudatur et alget.* But we would rather turn from this curious waywardness of Nature and let it lose the man in the bright cloud of his own great art.



PLAN OF ST. PETER'S, ROME.
By Baldassari Peruzzi.

THE AMERICAN ACADEMY IN ROME

BY CHARLES HENRY CHENEY

"WATERING THE PLANTS OF GENIVS" CELLINI

A GREATLY RENEWED INTEREST in the American Academy in Rome has been evinced recently by artist and layman alike because of the many changes and additions which it is now undergoing. Early in 1911 came the merging of the American School for Classical Studies with the Academy. This was soon followed by the announcement of the bequest of the Villa Aurelia, high up on the Janiculum Hill, commanding a splendid view of the whole city, and directly across from the Villa Medici of the French Academy. On this site extensive buildings are being erected, which, upon completion, will provide ample studios, dormitories, library, etc., for the housing of such an institution.

When finally established in these new quarters, the amalgamated Academy is to have a Director-in Chief, who will be nominal head and administrator of its business affairs, a School of Fine Arts under its own Director and a School of Classical Studies with its Director. Thus organized, there will be a large financial saving in the maintenance of one establishment in place of two, the Fellows will have the great advantage of close daily intercourse, and the fine library and splendid lecture courses for the classical students become available to the artists. These are very material improvements and plainly indicative of the growth of the institution. If they tell very little of the hard work and boundless enthusiasm of the Trustees who brought them about, they certainly have effectually called public attention to the training one can get in Italy. Thus they naturally revive in the minds of art students, at least, those old questions: Why go to Rome? What is to be had there? Why stay there so long in preference to other parts of Europe?

The answers to these questions are harder to arrive at than it would at first seem, as they involve practically the whole subject of modern art education. Unquestionably, however, one must appreciate that artists in America have had few such opportunities for development as has been given them in the establishment of this Academy in Rome. It is founded upon the theory that the young architect, sculptor, painter and archæologist should live together and together study the classic treasures of the Old World, absorbing and analyzing them for the secret of that refinement and skill that guided the hand of Greece, the Renaissance and other great periods. Do architects, in particular, realize what a wonderful possibility there lies here, how much it means to the training of the profession?

Certainly a great inspiration moved the late Mr. McKim and the little group who had worked with him on the World's Fair in Chicago, where those very possibilities of classic architecture had been so clearly revealed that the following year (1894) they determined upon and founded the School of Architecture in Rome. It was a success from the start, soon broadened to include painters and sculptors, and advanced its standard

[EDITOR'S NOTE.—This article was written with the idea of examining the purposes and opportunities of the Academy, chiefly with regard to its position in the education of American architects. More detailed information in regard to competitions for the fellowships, etc., can be had by addressing a post card to the Secretary of the American Academy in Rome, Chemists' Society Building, 50 East 41st Street, New York City.]

gradually until it became practically a post graduate institution of research. Now it is to include classical students. The union of the three arts, of artist and the professor of art, of architect and archæologist in a common study is a most happy idea. It opens new worlds, new points of view that cannot but stimulate each to a deeper understanding and a broader culture. In their work they are independent of teaching of any sort —they choose, with the approval of the Director, their own line of research, and are required each year to make only a certain number of finished sketches. The third year architect, sculptor and painter choose a problem in design that will permit of equal opportunity for study in collaboration.

Designed for mature men, it is not the purpose of the Academy to offer definite courses of instruction. It is not a school in the sense of the Ecole des Beaux-Arts in Paris, for instance. It is planned essentially for the man approaching thirty years of age, fully developed in technique and with some years of practical experience in his profession. He must already be trained in what to look for—to see possibilities as well as actualities—and he should be able to put down easily what he sees and thinks. Only thus equipped can he derive the greatest benefit of his sojourn there; it may well be said that "the more a man takes with him to Rome the more he will bring back." Coming after years of *projets* and the steady grind of preparatory work, this three-year period offers the artist a breathing spell in which to "find" himself, and at the same time the opportunity to acquire culture and taste in the most inspiring environment the world possesses.

Perhaps the strongest cause for founding the Academy was the generally increasing demand in America for evidences of higher culture and taste in all the arts, and particularly in architecture. Since the Periclean Age the civilized world, admittedly, has turned to Greece as having attained the highest æsthetic expression in artistic endeavor. Its perfection was appreciated and cultivated by the Romans, who adapted and modified it to their own various purposes, until many of the monuments of Rome became second only to the art which inspired them. Much of the later Greek work is also to be found in Italy—the temples of Pæstum and Sicily obviously furnish some of the best examples extant of Greek architecture. During the Renaissance the centre of the art world was definitely transferred to Italy. Thus, covering as it does these two great periods, Rome may be considered the logical focus for students of classic art, and the best base from which to approach Greece, Spain, France and the rest of Italy. It has long been considered to be of the highest importance to all students of art to study thoroughly the monuments of antiquity in these countries before they start upon independent professional careers.

This forms the *raison d'être* of the Academy, and emphatic conformation of these ideas is attested by the presence on the Board of Directors of such respected professional men as: (besides the late C. F. McKim and J. M. Carrère) William Rutherford Mead, William A. Boring, S. P. B. Trowbridge, and Cass Gilbert, architects; Edwin H. Blashfield and Francis D. Millet, painters; Daniel C. French, sculptor; Prof. Andrew F. West, of Princeton University, J. Pierpont Morgan, Robert W. De Forest, Henry Walters, and twenty other distinguished men. Every spring they award a fellowship of one thousand dollars a year each, for three years, to an architect, a sculptor and a painter, and to two classical students. These fellowships are won by competitions held under prescribed conditions and open to all citizens of the United States.

There is always lurking in the mind of every young artist—be he architect, sculptor or painter—the question as to the highest possible training for his profession. It is of vital importance: he knows that future success and the peace of his soul depend upon choosing the right course. Oddly enough, nearly every fellow artist, understanding this, will try to set him on the right track, and he is almost sure to be swamped



THE VILLA AURELIA, RECENTLY BEQUEATHED TO THE AMERICAN ACADEMY IN ROME.

On the extreme left can be seen the Villa Medici across the city.

The Arches on the right were part of the original Aurelian wall, from which the villa takes its name.

with well meant but conflicting advice. Of course, no formula can be made to fit all cases. Certain it is, however, that no artist can claim to be ready for independent work until he has developed himself along two distinct lines—technique and culture. With the growth of technique he learns how to draw, to compose, to plan, to render—it is a training of the hand, eye and the subconscious part of the mind to respond to thought and inspiration. But culture is deeper—it is essentially knowledge on which to base thought and inspiration—it is very largely a matter of education (and thus also to be required). While culture includes refinement and taste, it must not be confused with them, as they are personal. Undoubtedly this personal element, which varies so widely in different individuals, gives a flavor to expression, but it can hardly supply that deep background of learning which is acquired from long contemplation and researching among the remains of a previous art. An architect shows his culture very clearly in the character and execution of his façades and details—of course, in his plans as well, but there it is not so easily distinguishable. It is also a peculiar thing that real beauty and grace in façade seem nearly impossible of attainment by an architect lacking in this essential.

Mr. Edwin H. Blashfield tells us that the greatest artists of all ages were men of the highest culture. This does not necessarily mean college education, although in this country that is perhaps the most thorough foundation for the future acquirement of culture. At the proper age travel and study in Europe stimulate, inspire and advance the culture of an artist in the highest degree, because the art of all the ages is there—the monuments, decoration, frescoes, statues, above all the atmosphere which called them into being—that arouse the senses to the highest possibilities of effort. "Genius is eternal patience," so Michael Angelo is reported to have said, and certainly in those charming discourses on art with Francis of Holland* he brings out very clearly that success comes only by striving ceaselessly for perfection.

Sculptor, painter and architect, Michael Angelo remains the wonder of the ages—his very understanding of all the arts made him stronger in each of them. The great men of the Renaissance nearly all were so trained in the three arts in the "bottege" or studios of the goldsmiths. Vasari tells how Brunelleschi,* that first and most original architect of the early Renaissance, who designed the Pazzi Chapel, San Lorenzo, and the dome of the Cathedral in Florence, was at an early age placed in the Guild of the Goldsmiths that he might acquire the art of design. First mastering niello and bas-relief, he turned his attention to the adjustment of weights and the movements of wheels, and after this to many professions. Nor was it long until his excellence in architecture was recognized; he also discovered a perfectly correct method of perspective, the rules of which were little understood at that time. Thus working perpetually, his technical training became thoroughly developed. At twenty-four years of age he departed for Rome with Donatello, the sculptor, and there for six years they labored unceasingly, measuring cornices and taking ground plans, making careful drawings of all the vaults and arches of antiquity; and if by chance they found fragments of capitals, columns, cornices or basements of buildings buried in the earth, laborers were set to work to dig these things out, until the people of Rome came to call them "treasure-seekers." Donatello having returned to Florence Brunelleschi studied more industriously than ever, never resting until he had drawn every description of fabric—temples, basilicas, aqueducts, baths, arches, the Colosseum, amphitheatres, churches of brick, of which he examined all the modes of binding and clamping, as well as the turning of the vaults and arches; he took notes likewise of all the methods used for stone jointing, and having found that in all the larger stones there was a hole, formed exactly in the centre

*Raczynski—"Les Arts en Portugal."

*Vasari—"Lives of Italian Artists"—Havelock Ellis trans.



IN THE GARDEN OF THE VILLA AURELIA.

of each on the under side, he discovered that this was for the insertion of the iron instrument with which the stones were drawn up. Thus he restored the long lost use of the mason's clamp which has been in vogue ever since. The results of such study are manifest in those great monuments which he designed on his return to Florence, and Vasari's story of how these researches enabled him to construct the dome of the cathedral practically without scaffolding, after the greatest architects of all the countries of Europe had been summoned in congress and had declared it impossible, is ample food for thought.

There is no question but that there is plenty for the architect, sculptor or painter to occupy himself with in Rome. The Academy has broadened the field, however, further even than Brunelleschi ever dreamed of, and the Fellows are now required to spend a definite part of their time in Greece and the other countries where there are to be found important monuments and treasures of art.

While Rome is ideal for research among the classic remains of all the ages, and while the power of discrimination in beauty of form and color is awakened on every hand, it contains absolutely no preparatory or even intermediate schools of art for foreigners. What Rome and Greece have to give must be dug out by men well prepared in design, draughtsmanship and general education, who have gotten all there is to be gained from school projets. The spirit of competition, which is the life of all *atelier* work, is dead and buried in Rome. It is doubtful whether it could ever be built up. Probably the soft southern climate has much to do with it. Except for two or three months of rainy weather, the warm skies and atmosphere everywhere call for out-of-door work, and an artist takes to sketching like the much-mentioned duck to water. But the man who is not ready, particularly the would-be architect, finds little to do—except to make water colors—or is so staggered by the vast amount of material before him, that he flounders hopelessly. It is curious that each year still brings its quota of such men, sent by some well meaning friends at home, who thinks that Rome "ought" to be a good place for the beginner. Of course, every tourist gains from travel in Europe, but such mere sightseeing is nothing as compared to the intelligent study of a building, painting or piece of sculpture by a man with a well developed understanding of "motives," value and solution of the problem in design before him.

This distinction between the acquirement of technique and the acquirement of culture is not a new one; it is only recently, however, that attention has been called to it in America. The feeling seems to be growing that training is distinctly one-sided if it does not take both these acquirements into separate account and allow a proper time for each. For many years Americans have been going to Europe for advanced education in the arts—to the Ecole des Beaux-Arts in Paris, or to Rome or Greece. It is natural that, while the travels of students in these countries generally overlapped, a strong partisanship should have grown up about the place where each had spent the most of his time. The young man was often advised to go to one place in preference to the other, without any seeming analysis of what either one of them had to give. Only a short time ago a young draughtsman came to New York with a letter to a member of one of the most prominent firms of archtects in America, to seek advice. He was told to "Go to Rome, stay in Rome and come home from Rome." Some friends in another office, just back from Paris, told him that the only thing worth while was to go to Paris and get a diploma, and not to worry about "this measuring of mouldings." These are, of course, the extremes of partisanship, nearly always the result of an honest misconception of what kind of training Paris and Rome really offer. A logical and unprejudiced consideration of fact seems to show that these two great centres are, for Americans, entirely distinct in their teaching —Paris being chiefly valuable for its technical school and Rome for the cul-

ture of its antiquities—and that each is an almost equally important factor in any complete course of training.

As an active, virile and stimulating centre for technical training Paris has held undisputed sway for nearly two hundred years. Cloudy days two-thirds of the year and the bracing winters so conducive to atelier and other indoor work, the cosmopolitan crowd of students from all quarters of the earth, combined with that native French quickness of perception and expression in art, of attacking problems and the directness of planning that has entered into all our big work, and for the spirit of education which has built up our great schools of architecture. It has inspired the Society of Beaux-Arts Architects to maintain ateliers in forty-five cities in the United States and Canada during the past year, and the National Sculpture Society is now following their lead by establishing similar ateliers. It is perfectly remarkable the advance in art education in this country during the last



THE ENTRANCE TO THE VILLA AURELIA, ROME, ITALY.

and their great ability and cordiality in imparting them to foreigners, have built up a spirit of enthusiasm for work such as exists nowhere else to-day. In the study of design, of planning and composition, the Ecole des Beaux-Arts is everywhere acknowledged to be the foremost school for architects in the world. A very large number of the prominent architects of the United States have received at least part of their training there. The debt which this country owes to France on that account is immeasurable, particularly for the method

fifteen years: if the next fifteen years sees an equal advance, it is a question whether American students will need to go to Paris.

There are some things about the work in Paris, however, that cannot be engendered anew in this country in a hurry. M. Laloux used often to say to the younger men in his atelier there that more than half of what they learned must come from the older students—the only ones who could "beat into" the heads of the *nouveaux* many of the great truths



AN OLD TOWER IN THE GARDEN OF THE VILLA.

that every man must acquire in the "loosening up" process. These older men are most of them through with the regular work of the school but come back to the atelier until they are thirty to do the bigger competitions of the year, in order to be in training for the Grand Prix de Rome. Many of the quickest steps forward for the younger men came from "niggering" for *les anciens,* and from seeing them work. The *patron* of one of the oldest New York ateliers also points out that it must naturally be a good many years before we can accumulate enough real "monuments" of architecture here for students only to have to run around the corner, as in Paris, to see a good solution of some difficult point in a problem. But we must not forget that it was France who so freely provided the inspiration, theory and method for what we already have, and with the same cordial spirit in which she so freely gave her blood, and financial aid to our forefathers in Revolutionary days.

It has long been a noticeable fact that Americans who go to the Ecole des Beaux-Arts, or to other of the famous ateliers for painters and sculptors in Paris, become largely engrossed in technical matters of planning, color or composition, and generally seem to neglect any thorough course for the acquirement of culture. The French attitude of accentuated individualism in development and study, from the age of adolescence, is so opposite to our unified, all-in-one-mould system of education, that it seems well-nigh impossible to fall into their way of attaining culture. They hold the "science of drawing" to be the first and foremost thing that every artist must have and master, and certainly they carry it to great perfection. The French Government, as long ago as A. D. 1666, decided upon the value of supplementing this with a thorough culture course in the study of the monuments of antiquity. Thus grew up that now world-famous prize, the *Grand Prix de Rome.* Annually an architect, a sculptor and a painter are chosen by competitions open only to French citizens under thirty years of age, and sent for four years to the Villa Medici in Rome. The candidates in architecture alone have numbered recently as many as four hundred and fifty in one year. While only a few can win the prize, it points the proper way to culture for many other French students, and for foreigners of many countries. Spain, Belgium, Germany and England have long maintained Academies in Rome. Perhaps the best indication of results obtained is to be seen from the fact that during



DOME OF THE CATHEDRAL FLORENCE.
By Brunelleschi.

the past century the winners of the Grand Prix in their later years formed such a large proportion of the great artists of France. Garnier, Letarouilly, Besnard, Ingres are only a few of them.

The average citizen of the United States is practical first and artistic afterward. The revival of architecture in America, which set in upon the return of the first Paris trained men, some forty years ago, was eagerly hailed by the laymen because of practical planning and directness of solution of the problem in hand. But the great inspiration of beauty in façade was not appreciated and demanded until McKim, Mead & White and some others of recent years, awakened everyone to what might be done. Now the day is fast coming when neither beauty of façade nor utility of plan, will either one of them alone be acceptable.* The chief problem is to train the men that they may be so thoroughly equipped as both to be able to win their competitions by strength of planning, and to carry them out in this high standard of beauty and refinement.

Two recent events may be cited to show how strong the trend of opinion is becoming. The first is the holding this year in Paris, for the first time, of the competitions for the fellowships of the Academy of Rome, simultaneously with those held in the different cities of this country—of course, for American citizens only. The second is the suggestion by a prominent member of the Society of Beaux-Arts Architects,† that it would be a good thing to increase the Paris Prize to include a year in Rome. This prize annually sends an architect, by courtesy of the French Government, directly into the First class of the Ecole des Beaux-Arts, for two and a half years. Of course, most of the Paris Prize men now spend some time in travel in Italy—but as one of them expressed it, six weeks in Rome made him "fidgety," without a definite program of work after the strenuous competitions of Paris. Unlike sculptor or painter, who is used to choosing his own subjects for inspiration, the architect spends his life working out programs presented by others. Possibly this is why so many architects leave Italy without appreciating half of what is there. It is also difficult for a student who has never had practical work in an office, making full size details of stonework, to understand the necessity of measuring and drawing out cornices and mouldings. Who can appreciate, for instance, an egg and dart moulding until he has measured the cornices of the Farnese palace or of some great classic building? Thus the American Academy in Rome hopes to work out the most comprehensive scheme of study possible as a model not only for its own scholars, but for all Americans who go to Rome. But the secret of the subtle refinement of the Renaissance or of Greece can only be grasped by living some time with it, analyzing, sketching and measuring—not to learn to copy what it inspired, but to put the same culture and grace into new things at home.

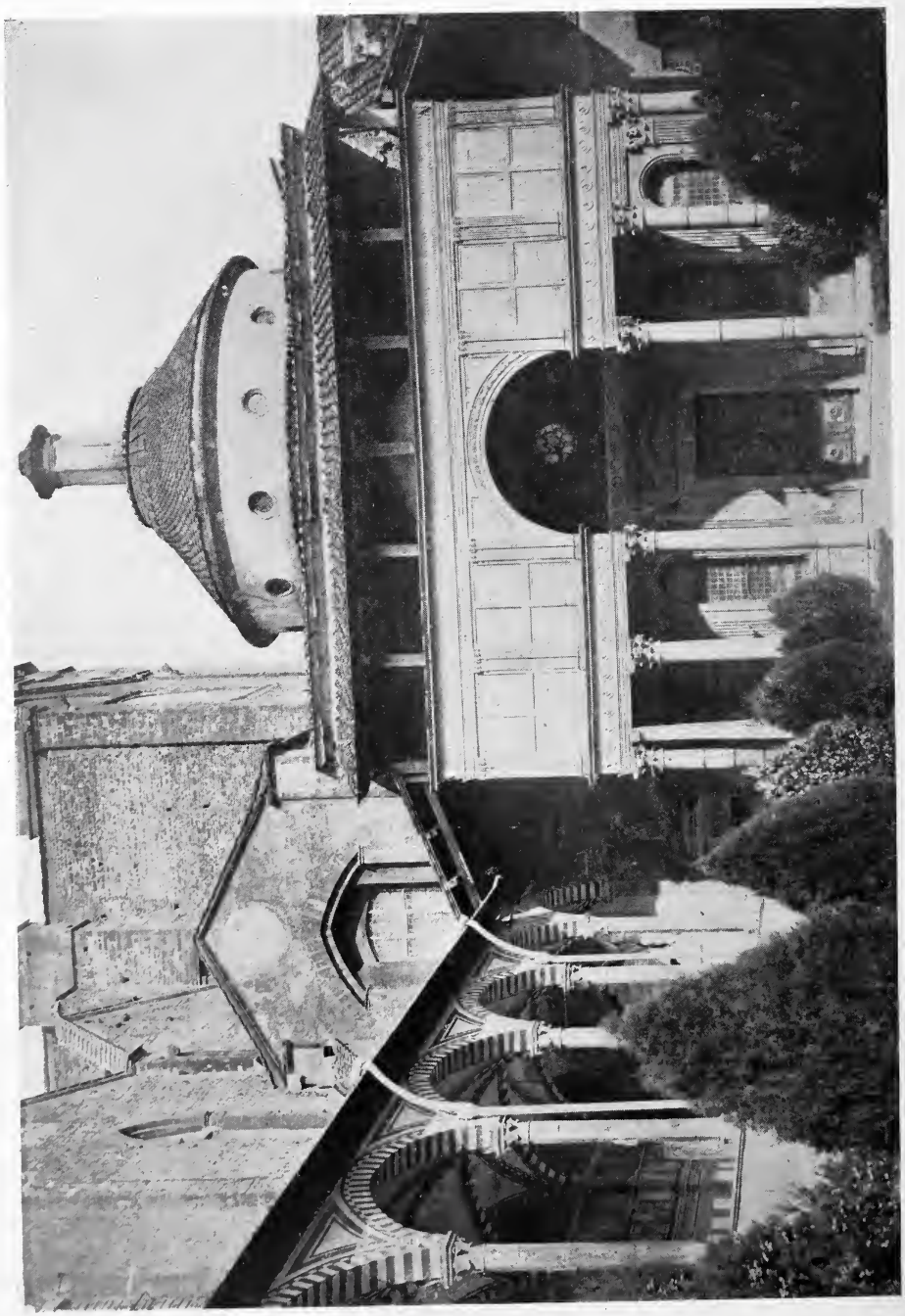
One of the greatest things gained from the French system of training, is opposition to copying and to too much formalism. Keeping this in mind a thorough knowledge of the classic forms is only a proper steadying influence to the strong modern tendency to originality, which, untutored, generally has ended only in the bizarre. Even the architects who are making such good use of Gothic forms in modern skyscrapers will attest to the truth of this statement.* While the Academy directs its students principally to the remains in Italy, certainly no man is considered cultured until he also has seen the magnificent Gothic cathedrals of France. It is for this reason that the Fellows are required to do a prescribed amount of travel, which may even include Spain and England and Germany.

The official adoption of the classic style of architecture by the United

*Mr. H. V. B. Magonigle points this out quite clearly in his chapter on Architecture in the "American Annual" for 1912, in speaking of the influences that go to make up our present day work.

†Mr. Donn Barber.

*Witness the presence on the Board of Trustees of the Academy of Mr. Cass Gilbert, whose introduction of the Gothic into the design of the West St. Building, met with such notable results.



THE PAZZI CHAPEL, FLORENCE, ITALY. BY BRUNELLESCHI.

States Government some years ago, undoubtedly has done much to increase the number of students who go to Italy. Scarcely a public building is projected in this country which does not include probable embellishment by sculpture and color decoration. Of mural painting, Italy and Rome particularly are thought to contain the world's finest examples, and one of the greatest opportunities which the Academy in Rome has today is to properly educate painters in this much neglected art. The great variety of examples, expressed in nearly every known medium, form the widest possible field for study. Mural painters can pore over Michael Angelo or Raphael with probably small chance of copying, while in a center like Paris they are so close to modern work that they seem often led to imitate it.*

"The artist seldom stays abroad long enough," says Mr. Francis D. Millet,† "to emerge from the stage of incubation to that riper period of experience when he has such command of his tools that he can forget them, when his effort is directed, not toward method, but toward result. Briefly and frankly our artists are only half educated. What the Academy proposes to do is to provide the opportunity for them to cultivate themselves. . . . . The young artist can be taught the mechanics of his profession, his taste can be developed and stimulated by calling his attention to the qualities of fine works of art, but no one can teach him to produce those qualities in his own work. He must arrive at it by enriching his mind with the knowledge of what has been done in the past, and by perfect familiarity with the sources of all great art. It is the purpose of the Academy to furnish the student exactly this kind of stimulus."

The work of the Fellows in classical studies is bound up in all of this, just as classical literature and archæology are full of the contemporary art and artists of the period. These students come to Rome principally for one of three things—for ancient languages, for literature or for study of the material remains. They prepare to become archæologists, authorities on certain periods of art and art history, and a few to become museum experts. This last is most important just now when so many new museums are springing up all over the country, in need of well-trained heads.

Most of the Fellows already hold a Master's, and often a Doctor's, degree, and have had a thorough grounding in ancient languages. It is chiefly an historical sense which takes them there,* to be right on the old stage of events, with the setting still there, and only the actors gone—a Mecca for imaginative reconstruction. Although they have a rigorous course of study before getting there, they need the perspective of the whole field, for which Rome is the best vantage point, to determine the meaning of classic art, literature and history. The artist is there to work from inspiration, and is affected by the inspirations of his historic surroundings. The classical student from the side of the scholar knows and can direct the art student to the right well. In return the artists give catholic interpretations, and receive an enrichment of deep and exact literary and historical knowledge. Both have their own methods of training—the combination is highly gymnastic and stimulating, and provocative of new ideas and independent effort. It is a great blending of the humanistic impulse with the modern purified revival of ideas in art and classical studies. It is the hope of the Trustees eventually to organize a separate Division of Mediaeval Studies and another of Renaissance Studies.

In this connection a most amusing point is brought out by a prominent sculptor,† who rejoices in the closer understanding that must come between artists and that professor of Greek sculpture, who is so prone to say, "Why don't you do things as the Greeks did?"

*This is the view of Mr. Edwin H. Blashfield, who believes that the younger American painters are too eager, and so interested in the manipulation of pigment color that they neglect to form a proper background of general culture.

†American Review of Reviews, vol. 31, (1905).

*So Professor Andrew F. West informs us.

†Mr. Daniel C. French.

Just as though he could have done so himself if he had happened to be a sculptor!

While the Academy in Rome is probably still too young to show how great its influence on American art will be, the work of some of its graduates has already set a highly notable standard.* One and all, they are very enthusiastic over their training, and have organized a strong alumni association to further the good work of the Academy. It has been suggested that the hundred and fifty or more men who have traveled abroad under different scholarships might well gather a few statistics as to what each found the most valuable way of working there. The collective result, if made public, would undoubtedly be of great use to all American art students. It is interesting to note that a large number of the graduates of the Academy received part, as least, of their technical training in Paris. One of the sculptors, who did very strong work in Rome, had previously studied six years in France and had received an honorable mention at the Salon.

The amount of individual time and effort the Trustees have put into the Academy's development can hardly be appreciated. These public spirited men have worked unceasingly for the past fifteen years, and many times, on account of a panic or for other reasons, they have drawn from their own pockets to tide things over. The late Mr. McKim, who was practically the founder, left his entire fortune, amounting to two hundred thousand dollars, to the Academy, and other recent benefactions have now finally given it a sound financial basis to work upon.

The comparison has often been drawn between the American Academy and the French villa Medici and its work. One of the greatest difficulties the Directors have met is to get men in any way as well qualified in preliminary technical training as are the men of the Grand Prix when they come to Rome, at the ripe age of from twenty-eight to thirty years. It is not so much that there are no men of equal training in America, but that there is such a tremendous volume of building operations now going on in this country.* There is such need of men with any training at all that long before they are thirty those strong enough to win the Fellowships are thrust into practice or into a position of responsibility. Thus most of them totally lose sight of the necessity of adding the final polish to their education. Naturally men of even mediocre training approaching thirty years of age are still greatly in demand: but will these men ever be able to compete later with those whose training has been thorough? Will this country much longer accept mediocre architecture or art of any kind? Already much is being said about the survival of the fittest. With all the prizes and fellowships now offered, it is squarely up to the young men whether they will let the "bird in the hand" be "dust in their eyes."

The thought of being away three years bothers some men—perhaps they should be given the opportunity to go to the Academy for one or two years, with the option of the balance of the regular three-year term. It is safe to say that they would be only too anxious to stay it out after seeing how short that time is for all the work to be done in Rome. The early marriage age in America also has to be taken into consideration and the Academy now accepts married men, provided their families live outside the villa.

In conclusion, the inference can well be drawn that "Rome teaches what to do, Paris how to do it." It may seem odd that Paris enters so much in relation to the Academy in Rome, but their instruction is so different and yet they so counterbalance each other in the training of the artist that only by com-

*One has only to mention the work of H. V. B. Magonigle, oldest alumnus of the Academy, of John Russell Pope, who previously had completed the course of the Ecole des Beaux-Arts in Paris and of Harry Allen Jacobs, among the architects; of H. A. McNeil, among the sculptors, and of many of the other graduates of the institution.

*In the year 1910, the building operations in the City of Greater New York, exceeded $210,000,000. Professor A. D. F. Hamlin, of Columbia University, has figured out roughly that this was more than the combined cost and labor involved in building all the forty great French cathedrals of the thirteenth century.

parison can a real understanding of each be arrived at. The Academy believes strongly in the French training or its equivalent, and really needs it as a prerequisite to accomplish the best results. Naturally every patriotic American looks forward to the time when our artists can be fully prepared in this country. However while we may sometime be able to duplicate here much of the training to be had in Paris, it obviously never will be possible to transplant the classic monuments of antiquity, nor the setting which inspired and frames them. For this reason there will, for several generations at least, be pressing need of a central institution in Rome to provide for their proper study. Exactly for this purpose is the American Academy in Rome maintained, with the sanction of the United States Government, through a Federal charter. Who could conceive of a better opportunity than it now offers? The architects, sculptors, painters and classical students who can win the competitions are sure to find themselves among those doing something worth while, the really great in American art. Perhaps with its growing development as a separate profession, a fellowship in landscape architecture some day may be added to their number. Already the winning of a fellowship gives a man standing in his profession beyond his fellows. With the rapidly increasing interest and ever growing number of competitors this prize should soon outrank in importance every other competition. The Frenchmen believe that to win the Grand Prix de Rome at twenty-eight, a man must begin trying the competitions at eighteen and hammer away at them until he wins. When the advantage gained from "going into training" for prizes in this way once begins to be appreciated in this country, the Trustees will be swamped with applications for the fellowships. Certainly no art student in the United States can feel that he has not every opportunity to make the most of himself. He only needs to remember, as Longfellow says, that—

"Art is long, and time is fleeting.'



INTERIOR OF SAN LORENZA—FLORENCE, ITALY. BY BRUNELLESCHI.

EARLY AMERICAN CHVRCHES

PART IV

SHIP MEETING HOVSE, HINGHAM, MASS. ST. PETER'S, NEW KENT COVNTY. ST. LVKE'S, SMITHFIELD. OLD MEETING HOVSE, LANCASTER, MASS.

BY AYMAR EMBVRY II

It is seldom we find framework so skillfully put together that it is able to withstand the wear and tear of over two centuries. In the case of the old "Ship" Meeting House, however, we are shown that the timbers were selected and erected in the year 1680.

On May 3, 1680, the selectmen was directed to carry on the business to effect about building a new meeting house, and at the same meeting it was voted to set it up where the old one now stands. Violent conflicts took place in regard to the placing of a meeting house in which the interference of the general cast was required.

A tradition is handed down that the site for the meeting house was fixed on the lower plain, that the day was appointed for the raising of the frame, but that on the preceding night it was carried to the spot where the meeting house now stands.

On August 11, 1680, the dimensions of the house were fixed by a vote of the town. These being fifty-five feet in length, forty-five feet in breadth and height of the posts twenty feet. There were galleries on the side and porch ends. On May 2, 1681, the town approved of what the Selectmen had done in relation to the new meeting house and its location.

New England can boast of many of the quaint religious landmarks of the colonists. The severe taste of all of these settlers is exemplified in the style of the architecture employed in Old Ship.

It is interesting to know that the building was given its peculiar name because of its appearance. It is two stories in height on a rectangular plan. The roof is in the form of a truncated pyramid surmounted by a belfry and lookout station. This "lookout" has given the church its nautical "nickname." Surmounting the belfry is a weather vane.

A notable feature of not a few of the old meeting houses of New England is the copper weather cock, perched upon the top of the spire, the purpose of which is to remind the church of Peter's warning and constitute a call of repentance. The most famous of these church roosters were made by a noted London coppersmith and brought to this country in 1750. They are now to be found on the old South Church in Boston, and on churches in Newport and Springfield.

The church stands today, as far as the exterior is concerned, just as it was originally erected, except for a small porch added to the west side.

The interior of the church is rather prosaic. Whatever elaboration we find is the product of the last few years. As will be seen in the illustration shown herewith even the bell rope is allowed to dangle in the centre aisle. The pulpit is rather a massive structure. A curiously contrived canopy answers for a sounding-board.

The organ was not introduced until the year 1866.

Bishop Meade, in his eulogy of the church says, "There exists nowhere within the original limits of the United States a house for public worship as old as the meeting-house of the First Parish in Hingham, which still continues to be used for the purpose for which it was originally erected."

ST. PETER'S CHURCH

New Kent County, Virginia

ST. PETER'S PARISH, it is believed, was established with the forming of the New County of Kent, which was formed from the County of York in 1654. There are no extant records for the period between its foundation and the year 1684.

The first reference in the Vestry Book to the present St. Peter's Church is found in the minutes of the meeting held August 13, 1700: Whereas the Lower Church of this Parish is very much out of Repair and Standeth very inconvenient for most of the inhabitants of the said parish: Therefore ordered that as soon as conveniently may be a new Church of Brick Sixty feet long and twenty fower feet wide in the cleer and fourteen feet pitch with a Gallery Sixteen feet long be built and Erected upon the maine Roade by the School House near Thomas Jackson's; and the Clerk is ordered to give a Copy of this order to Capt. Nicho Merewether who is Requested to show the same to Will Hughes and desire him to draw a Draft of said Church and to bee at the next vestry . . .

Work on the new church was begun in the spring of 1701 and in 1703 the work was so far advanced that services could be held in the building. This building remained unaltered for twenty years or more except for a brick wall built around the church yard, "s'd wall to be in all Respects as well done as the Capitol wall in Williamsburgh."

In 1722, a belfry was erected at the west end of the church and in the year 1740 we find that, "the Minister and Vestry of this Parish have Agreed with Mr. Wm. Worthe, of the Parish of St. Paul in the County of Stafford, Builder, to Erect and Build a Steeple and Vestry Room according to a Plan Delivered into the Vestry drawn by the S'd Walter (?) for the Consideration of One Hundred & thirty Pounds at times to be paid."

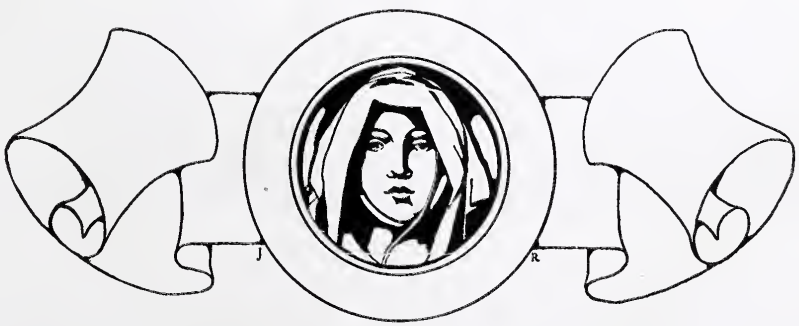
Such minor alterations and repairs as have been made to the old church since 1740 have not changed its outward appearance to any great extent. St. Peter's looks to-day much as it did toward the middle of the eighteenth century with the added attractiveness produced by the mellowness of age.

During the Civil War, St. Peter's was defaced by the soldiers who used the building for a stable. The war did much to scatter the congregation. There were those left, however, who set to work to renew and repair the damaged church.

The interior of St. Peter's Church as it appears to-day deserves notice. The walls are plastered, marked off in blocks and colored a soft grey. The benches are simple in design and have been painted a sober brown. The picture obtained is somewhat severe in its simplicity, but not without advantage as offering little to distract the worshippers' attention.

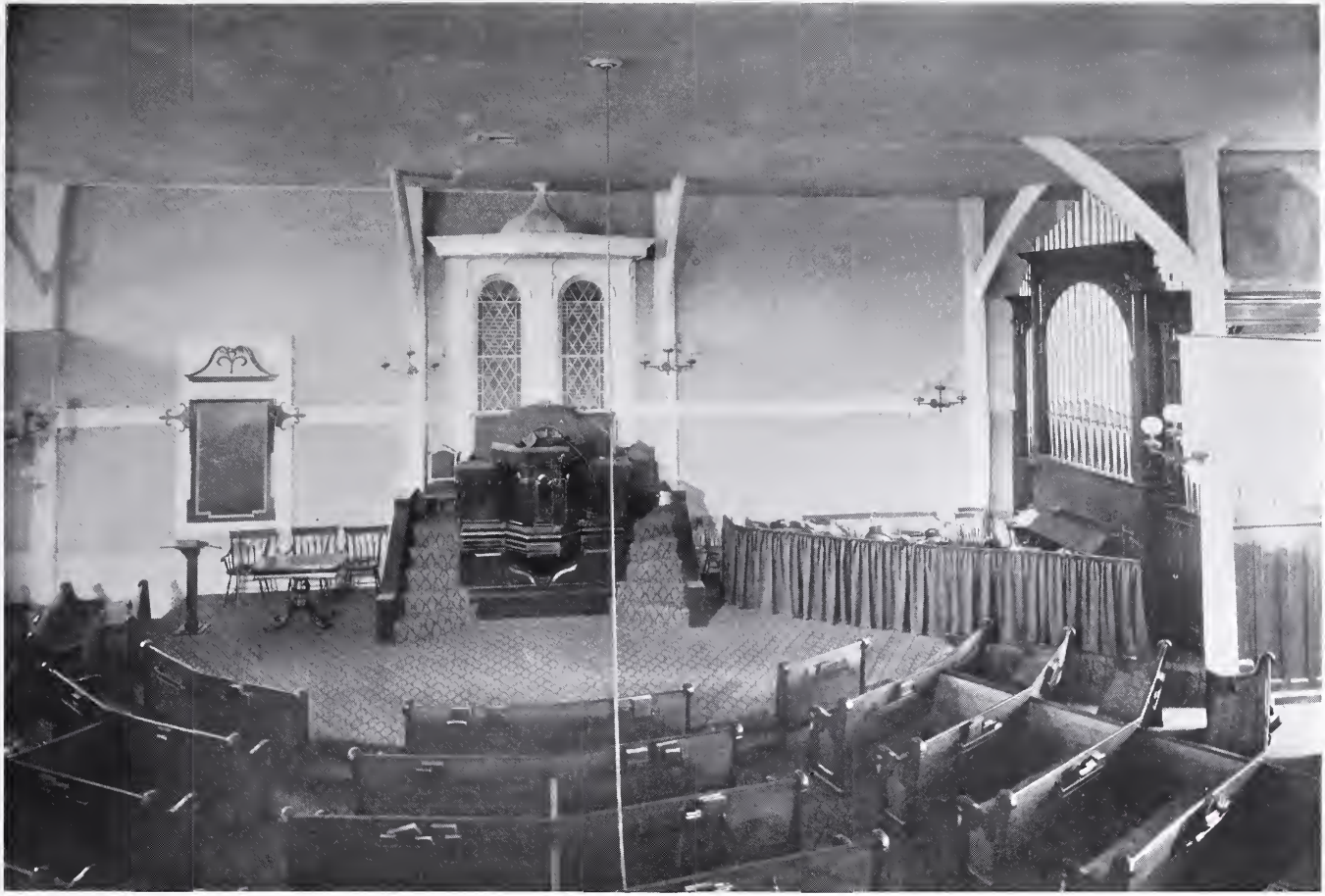
St. Peter's Church is about twenty miles from Richmond on the York River Branch of the Southern Railroad. One drives from Tunstall's station for a short distance.

Services are still being held in St. Peter's on one Sunday of the month.





EXTERIOR OF OLD "SHIP" MEETING HOUSE,
HINGHAM, MASSACHUSETTS.



INTERIOR OF OLD "SHIP" MEETING HOUSE,
HINGHAM, MASSACHUSETTS.



INTERIOR OF ST. PETER'S CHURCH,
NEW KENT COUNTY, VIRGINIA.



EXTERIOR OF ST. PETER'S CHURCH,
NEW KENT COUNTY, VIRGINIA.



INTERIOR—ST. LUKE'S CHURCH,
SMITHFIELD, VIRGINIA.



EXTERIOR—ST. LUKE'S CHURCH,
SMITHFIELD, VIRGINIA.



Photo by G. P. King.

OLD MEETING HOUSE,
LANCASTER, MASS.



Photo by G. P. King.

OLD MEETING HOUSE,
LANCASTER, MASS.

ST. LUKE'S CHURCH

Smithfield, Virginia

THE OLD DOMINION contained several of the now famous historic churches. Chief among these is St. Luke's, Smithfield, in the County of Isle of Wight, Virginia.

Erected in 1632, by Captain Bridges as builder, this edifice was used continuously for over two hundred years as a place of worship. The record tells us that in 1836 the church was abandoned and left to the seekers after relics. Evidently these proved of great interest and value, because we are told that in 1887 scarcely any portion of the original church remained except the brick walls. All of the removable fixtures, woodwork and glass were carried away.

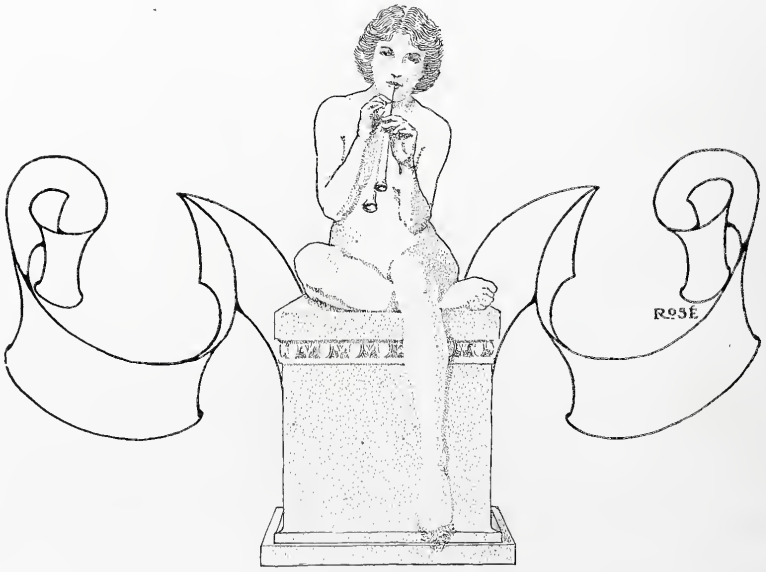
The most interesting architectural feature of St. Luke's is the east window. Brick mullions divide this opening into seventeen distinct windows. This window retains its original construction today as will be seen from the photograph used to illustrate the interior.

The restoration of St. Luke's was carried on by Dr. David Burr, who visited the parish in 1887.

Many new features were added while the restoration was going on. The architectural style and traditions belonging to the early structure were most carefully studied and incorporated in the present building. Thanks to the interest created in no less than twenty-one of the United States a fund was raised which provided for twelve memorial windows. It is interesting to note the names of those to whom the windows were dedicated: George Washington, Gen. Robert E. Lee, Captain Bridges, Rev. Mr. Hubbard, the last Colonial rector, Sir Walter Raleigh, Capt. John Smith, John Rolfe, who married Pocahontas, Bishops Madison, Meade, Moore and Johns, the first four Episcopal Bishops of Virginia, and the Rev. Dr. Blair, founder of the College of William and Mary.

In order to keep as nearly as possible to the original building the chancel railing was constructed from portions of the original roof which had fallen in. From the old Colonial Church at Jamestown the restorers obtained several thousand bricks, which were incorporated in the present building.

Smithfield is about ten miles from Fortress Monroe, Va.




PORTFOLIO
OF
CVRRENT
ARCHITECTVRE



THE RESIDENCE OF PRENTIS COONLEY, ESQ.,
LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



THE "ORCHARDS"—RESIDENCE OF TYLER REDFIELD, ESQ., GREENWICH, CONN. FRANK MOORE, ARCHITECT.



THE MONTGOMERY HOUSE AT HOUBBERT WOODS, ILL. HOWARD SHAW, ARCHITECT.



HOUSE OF E. L. PALMER, ESQ., ROLAND PARK, MD.
EDWARD L PALMER, JR., ARCHITECT



SKETCH SHOWING PROPOSED SUMMER HOME FOR THE PRESIDENTS OF THE UNITED STATES NEAR DENVER, COLO. J. B. BENEDICT, ARCHITECT.

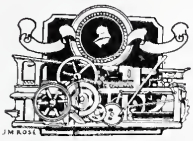


NEW BUILDING FOR THE LOCOMOBILE CO. OF AMERICA, NEW YORK CITY. JOHN PETITT AND HENRY KIRBY, ARCHTS.

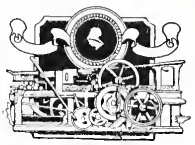


MAIN ENTRANCE DETAIL — HOME OF THE CURTIS PUBLISHING COMPANY, PHILADELPHIA, PA.
EDGAR V. SEELER. ARCHITECT.

A MODERN PVBLISHING HOVSE



THE CONSTRVCTION & EQVIPMENT OF THE NEW BVILDING FOR THE CVRTIS PVBLISHING COMPANY PHILADELPHIA, PA.



BY MONTGOMERY SCHVYLER & THOMAS NOLAN, F.A.I.A.

PART I

It is quite out of the question to talk about the new building of the Curtis Publishing Company on Penn Square in Philadelphia without adverting to the enormous scale of the concern, even though the adverting may seem to connote advertising. The fact is glaringly plain that when you have two periodicals, each of which has arrived at a circulation of a million and three-quarters, be the same more or less, and a third which is visibly headed towards the same elsewhere undreamt-of goal, the production and promulgation of them requires a deal of accommodation. Just how many thousands is the population, in business hours, of the new building I have no doubt been informed, but if so have promptly forgotten, as also the dimensions of the new building. These are very considerable and take up a large area of about the dearest land in Philadelphia. And, large as the building is, it is to be still enlarged, by occupying adjoining land, to half as big again, or perhaps even bigger.

Facing Independence Square, a judicious architect could not help taking account of the venerable and illustrious edifice which is already in possession of that clearing. How well the Philadelphians have taken care of that unique monument, for the behoof not only of themselves but of all Americans. As "Independence Hall" it has now acquired the unusual dignity of almost a hundred and forty years. As the State House of Pennsylvania it probably antedates any public building now in this country, excepting the old State House in Boston, having stood and discharged its public functions for a century and three quarters. The original building, designed by the amateur architect and professional lawyer Andrew Hamilton, as the contemporaneous Christ Church was designed by the amateur architect and professional physician John Kearsley, was already a hundred years old when Robert Mills added to it the fire-proof wings. Even a modern office building, erected in sight of such a monument, is forced in decency to recognize its vicinity. One of the many commendable points in the design of the Curtis Building is that it recognizes and defers to the neighbor in possession as much as a ten-story building of great area can defer to a smaller and humbler relic of antiquity. A skyscraper, if a ten-story building can any longer be described as such, which should ignore the little elder brother and compose itself in the tip of the present mode would be an outrage upon comity and good taste of which one is glad to note that the owner and the architect of the new building have shown themselves incapable. In fact, any proclamation of novelty and up-to-dateness in the architecture of the Curtis Building has been shunned instead of being sought. That is one of the gratifying things about it. If there be a combination of material which is familiar to Philadelphia from of old, and endeared by its familiarity, it is precisely the combination of red brick and white marble which is shown in Independence Hall and was for several generations shown in all the domestic building of what was still "The Quaker City." That is the combination chosen for the new building and in all details in which con-

formity was practicable, even to the bond and the joints of the brickwork, the old Philadelphia fashion has been followed.

To be sure, the resemblance cannot be complete. The builders of the old State House and their contemporaries were hampered at every turn by lack of means, and in the new building it is plain that the means have been ample. The greater credit to the modern architect and his client for refraining from making a show of them and for sticking to the modesty and simplicity of the old examples. They have done nothing in this exterior which the old builders would not have been glad to do if they had been equally unrestricted. The entrance, with its colonnade, is the one exterior feature which gives the sense of the lavish employment of money; and indeed not lavish, but liberal and ample are the proper adjectives to apply even to that. An order of a single story would have been belittled by the bigness of the building. Two stories were really required to put the order in scale. And, given the scale and the material, to put the columns in monoliths instead of building them up in drums was merely to do the thing handsomely. The Ionic of the capitals harks back beyond the time when the Ionic of the Erechtheum, doubtless intrinsically preferable,



Washington Square.

Philadelphia, Pa.

THE HOME OF THE CURTIS

had been exhumed and applied to modern uses, harks back to the Ionic of the Italian Renaissance.

It is the same within. Nobody who goes through this building will think of disputing that this is "the architecture of efficiency." The strictly manufacturing departments, the pressrooms and composing rooms and stereotyping rooms and paper-stores (fancy storing paper for a total "circulation" of well over three millions) are even the fastnesses of a rather grim utilitarianism. Even in these apartments, however, in which the primary requisites of efficient labor, including good light and air, are the chief data of the design, the visitor has not the same sense he has in some factories which boast themselves to be examples of the architecture of efficiency, that everything that pertains to the brightness and enjoyableness of life has been rigorously and on principle excluded. Factories of this kind, ostentatiously limiting their architecture and their equipment to the physically indispensable, one has seen in which it has been borne in upon him that they provided, in spite of themselves, facilities and provocations for the workman to hate his work, and from which one could readily conceive that the workmen emerged only to plot anarchy. As



Independence Square.

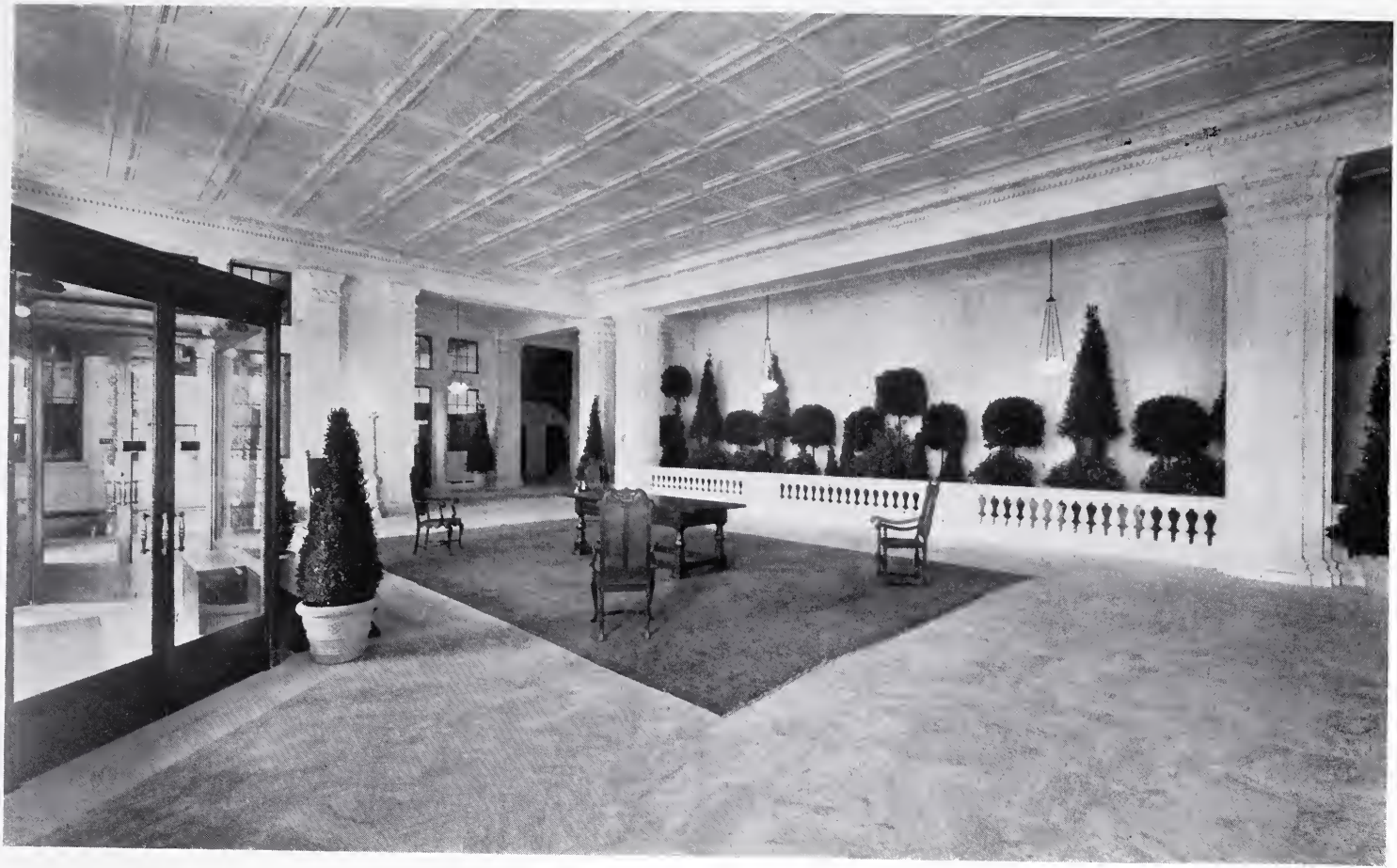
PUBLISHING COMPANY.

Independence Hall.

Edgar V. Seeler, Architect.



THE BOARD ROOM—HOME OF THE CURTIS PUBLISHING COMPANY, PHILADELPHIA, PA.
EDGAR V. SEELER, ARCHITECT.



THE GRAND LOBBY—HOME OF THE CURTIS PUBLISHING COMPANY, PHILADELPHIA, PA.
EDGAR V. SEELER, ARCHITECT.



Main Reception Room.



Bronze Elevator Doors.

HOME OF THE CURTIS PUBLISHING COMPANY.

Philadelphia, Pa.

Edgar V. Seeler, Architect.

William Morris has it: "If I had to spend ten hours a day working at something that I hated, I should spend my evenings, I hope in political agitation, but I fear in drinking." There is no temptation to such sentiments in the barest and baldest parts of this publishing establishment, while in what may be called the residential regions in which the multitude of men and perhaps especially of women spend their working days, there is not only every provision for their physical comfort and well-being, but there is ample recognition of the fact that man and perhaps especially woman does not live by bread alone, but has social and mental as well as physical needs. One inspects with complacency the provision for lunching and clothes-drying and the like, and the provision for sudden seizures of illness in the completely equipped little hospital. But one inspects with more than complacency the provision for the out-of-door promenade and the indoor "lounge." These things, one may say, not only discourage the anarchistic sentiments which some examples of the architecture of efficiency have the look of encouraging. They constitute as effective a safeguard as could well be named, "in the present state of the art," against the formation of class-feeling, against hatred, envy, malice and all uncharitableness. And in these places one is pleased to note some relaxation of the rigidity of the architecture of efficiency, so that the "recreation-room," for example, while still evidently part of a place of business, is as unmistakably a place of social intercourse and relaxation. "The hearth" is the traditional social centre and the mere introduction of a fireplace and a chimney would stamp the apartment, even in an unfurnished condition, as a place in



The Office of Mr. Cyrus Curtis.
HOME OF THE CURTIS PUBLISHING COMPANY.
Edgar V. Seeler, Architect.



Women's Rest Room.



The Hospital for Women.

THE HOME OF THE CURTIS PUBLISHING COMPANY.

Edgar V. Seeler, Architect.



Recreation Room.



Terrace Outside Recreation Room.

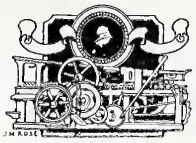
THE HOME OF THE CURTIS PUBLISHING COMPANY.

Edgar V. Seeler, Architect.



DETAIL OF MARBLE COLONNADE—THE HOME OF THE CURTIS PUBLISHING COMPANY, PHILADELPHIA, PA.
EDGAR V. SEELER, ARCHITECT.

A MODERN PVBLISHING HOVSE



PART II

THOMAS NOLAN

THE COMPLETION of the most notable private building for manufacturing and executive uses in a great city, a building which is not only one of the largest factories in the world for the production of magazines, but also one of the most successful solutions of a difficult architectural problem, is of more than local interest.

It has been said of the publications of the Curtis Publishing Company that they are unique, each in its own sphere; that one is not in the least like any other in existence, or that ever was in existence and that another also is in a class by itself, and has an individuality even more pronounced than the first. Perhaps either statement may be truthfully made of this great building now housing the army of workers that brings them to light. It is itself unique. Just as the work of the editors of these periodicals faithfully reflects the men themselves, just as they think in the terms of their readers, so this finished work of the architect and the engineer expresses the solved problems and the satisfied demands of architectural fitness and of practical needs and necessities. The architects and the engineers have thought and planned and wrought in terms of both the æsthetic and the utilitarian requirements, and have thus become at once successfully intelligible in their interpretation of their problem and intelligently successful in its solution.

It is fortunate that no single edition of one of the magazines has to be stacked up in one pile, nor its pages placed side by side. For in the former case the building would have to be 29,100 feet high, about fifty-two times as high as the Washington Monument or twice as high as the Matterhorn; while in the latter case the pages would go around the world one and a fifth times.

The complication involved in the planning and equipment for an institution of this kind may in a way be understood and appreciated when one learns that it takes an entire month, except Sundays, to print an edition of one of the magines and that during all this time the presses are hurrying out over 6,800,000 pages a day of this one magazine alone, the actual daily output in printed pages for all publications being in the neighborhood of 27,860,000 pages a day; when one is told that they turn out of this great shop 125,000,000 complete magazines every year; that it takes forty large folding and binding machines to bind them; that one edition of one of the periodicals weighs 2,250,000 pounds and that the paper it is printed on, if laid out flat in a single sheet would cover four square miles; that it takes sixty-five railroad cars to move and distribute it and over 60,000 pounds of ink to print this one edition.

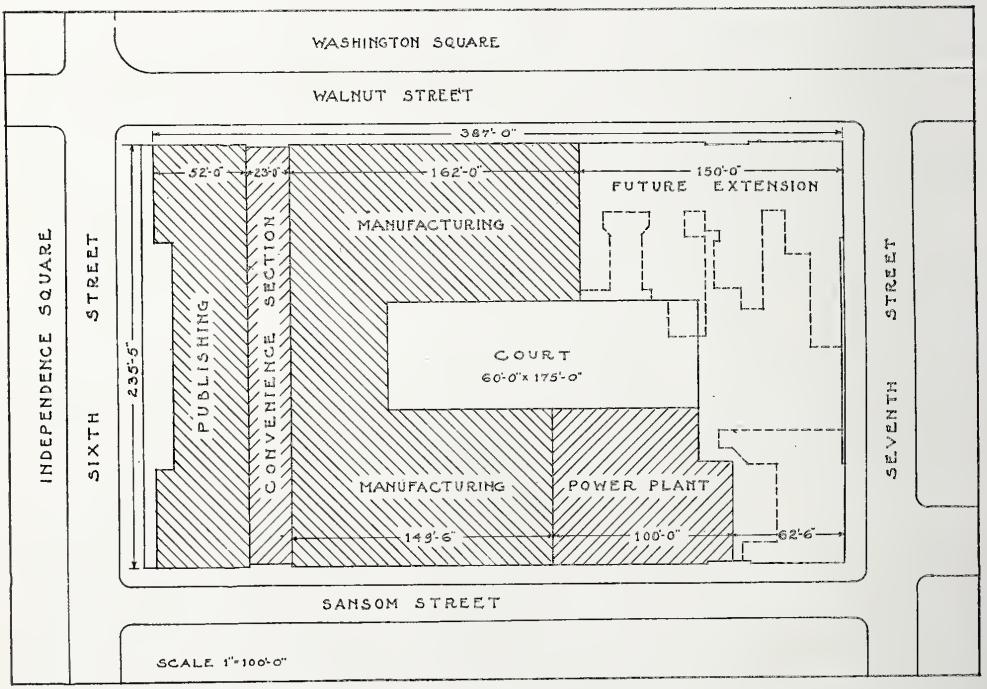
The company in one year's time uses approximately 12,000,000 United States postage stamps on its correspondence; it pays the post office over $400,000 a year to carry its magazines; it receives in its editorial department alone over 80,000 letters a year and in its business departments over 2,000,000 letters a year. It has been suggested that with a present population of 3,500 employees and with nearly that number of engine horse-power, every worker represents about one horse-power. Perhaps this may be taken as the index of the real efficiency of this well-equipped house.

Frank C. Robert & Company and Edgar V. Seeler are the architects and engineers of the building and their work represents the best thought of modern archi-

tectural and engineering practice. During the recent dedication of a great department store in Philadelphia by the President of the United States, a distinguished architect said it was the last word of housing and handling merchandise, and a work into which the architect and the builders had put much of their lives; and so this Curtis building is the last word of caring for all the activities of one of the world's greatest publishing houses.

architects and engineers following and adapting in a general way the simple Colonial motives used in the design of Independence Hall.

The removal of the old buildings was begun in April, 1909, and the excavations for the foundations of the power building in May, 1909. The erection of the steel frame of the power building was begun in August, 1909, and completed about January 1, 1910; while the erection of the steel superstructure of



Block Plan.

THE HOME OF THE CURTIS PUBLISHING COMPANY.

Edgar V. Seeler, Architect.

The site, which with the old buildings on it, cost over one million dollars, is historically one of the most famous spots in America. Occupying an entire city block, it is bounded by Sixth and Seventh Streets on the east and west and by Sansom and Walnut Streets on the north and south. Independence Square is on the east and Washington Square on the south, both of great historic interest; and the general character of the building is in keeping with that of its surroundings, the

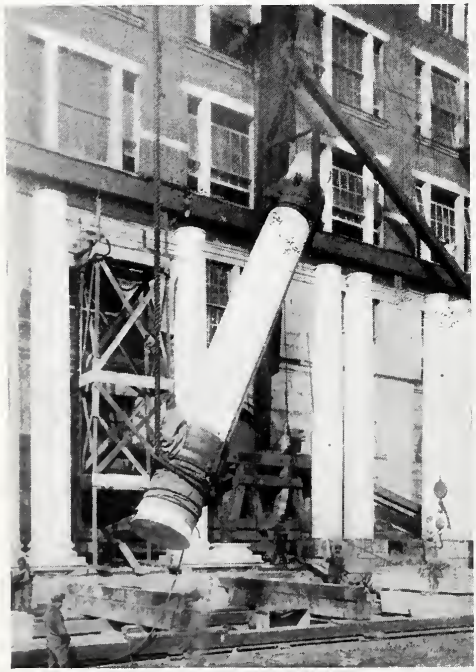
the Walnut Street portion of the manufacturing building, begun on December 22, 1909, and of the publication building, the convenience belt and the Sansom Street addition of the manufacturing building, followed in sections, about in the order named.

The materials used for the facing of the street façades are Milford, Massachusetts, granite for the base-course below the first-story floor level and for the steps and platform leading to



THE MARBLE COLONNADE — HOME OF THE CURTIS PUBLISHING COMPANY, PHILADELPHIA, PA.
EDGAR V. SEELER, ARCHITECT.

the Sixth Street entrance; "old English" red brick, made in a special size, 3¾ by 8⅝ by 2¼ inches, with ¾-inch horizontal and ⅝-inch vertical joints, laid in Flemish bond similar to that used with the 4 by 8 by 2-inch bricks laid with a ½-inch horizontal and ⅜-inch vertical joint in Independence Hall; and white Vermont marble for the trimmings in general and for the entire first, second, ninth and tenth stories of the publication building, including its Sixth Street colonnade and third-story and roof balustrades. The fourteen columns of this impressive col-



Setting Shaft of a Marble Column.
THE CURTIS BUILDING.

onnade are 32 feet 8½ inches in total height and 3 feet 4 inches in lower diameter, the shafts being monoliths and weighing about 21 tons each. It required a year to quarry them; and to set them in place, a specially designed tackle, shown in the accompanying illustration.

Bronze balustrades are set in between the columns of the marble colonnade and in front of the windows of the ninth story of the publication building. There are two beautifully wrought bronze lamp-standards, one at each side of the main entrance steps, and bronze gates at the main entrance. The walls of the interior light-court are faced with cream-colored terra-cotta.

The general structural character of the buildings is that of the fireproof steel cage supporting the floors and roofs and their loads and also the partitions and outside enclosing walls. The buildings of the plant will eventually cover the entire 235 by 387-feet city block, except a 60 by 175-feet interior court area, reserved for light and air. The accompanying ground plan indicates the scheme of buildings, those completed and those still to be erected, and shows also their division into four distinct parts, the publication building, the convenience belt, the manufacturing or mechanical building and the power buildings, with the open court in the middle. The publication building, which faces Sixth Street, is 235 by 52 feet in plan; the convenience belt, immediately west of this, 23 by 235 feet; the manufacturing building, facing on Walnut and Sansom Streets, 162 feet long by 88 feet deep on the Walnut Street side, with a section 54 by 60 feet just west of the convenience belt and an 88 by 150-feet Sansom Street addition; and the power building, facing on Sansom Street, about 88 by 100 feet in extreme dimensions. Other sections will be required to cover the remaining ground space of about 25,000 square feet set apart for future buildings and fronting on Walnut, Seventh and Sansom Streets. The present buildings contain floor space equal to about 630,000 square feet or about fourteen and one-half acres.

All the buildings except the power-house and the convenience belt have ten stories above grade and rise to a height of about 176 feet. An eleventh story over part of the structure, together with a basement and basement mezzanine, increase the total height to about 220 feet from the bottom of the deepest foundation to the highest point of the roof. The power building has eleven main stories and its roof is about 180 feet above grade. The height of the stories in the publication and manufacturing buildings, above the 20-feet 8-inch first story, is

generally 16 feet, while in the convenience belt double tiers of vaults, toilet-rooms, store-rooms, etc., are provided by introducing mezzanine floors.

In the publication building the first or ground floor is given up to the entrance hall, cashiers and bookkeeping departments, daily mail department and rooms for the reception of visitors; the basement to a storeroom with steel shelving for current stock supplies; and the basement mezzanine to the women's locker-rooms, toilet rooms, clothes-drying room and a separately entered boys' locker-room. The second and third stories are entirely given up to the circulation departments; the fourth to the administration and advertising departments, the former occupying the southern half, and including the offices of the president and of the secretary and treasurer; the fifth to the circulation department, with the office of the manager in the southeast corner; the sixth to the editorial department of the Saturday Evening Post and the Country Gentleman, with the offices of the editors; the seventh to the editorial department of the Ladies' Home Journal, with the office of the editor; the eighth to the art department of the last-mentioned magazine in the north half and to the rooms of the training school for the clerical force of the circulation department in the south half. In this story a space about 17 feet wide at the Walnut Street end is taken up by the board-room and the ante-room leading to it.

The ninth story is given over to the women's lunch-room, on the walls of which are seventeen beautiful wall panels by Maxfield Parrish, to the manager's dining-room and to a private dining-room with ante-room, at the south end; and the tenth story to a large rest-room for women, well fitted with comfortable chairs and lounges, a library, offices of the welfare department, a well equipped hospital and smaller rest-room with six beds, a large auxiliary lunch-room, servants' dining-room, kitchens, pantries, etc. There is a broad staircase from the women's lunch-room to the auxiliary lunch-room in the south end of the tenth story, from which an inclined passageway leads up to the recreation-room in the upper story of the manufacturing building.

What may be called the "welfare" department of the company is particularly well organized and many details of the planning and the installation were arranged to meet its requirements. The health and comfort of the employees are well looked after. In stormy weather wet wraps are dried and cared for; there are lunch-rooms in which wholesome foods are furnished at nominal prices, and on the walls of which are paintings by masters of mural art; quiet rooms are there with the big chairs and lounges of the luxurious club; recreation rooms and roof-garden, pure drinking water; softened and diffused artificial light to work in during the long winter days; and a hospital and trained attendants for those in need of temporary assistance.

The kitchen and dining-room apparatus represents a distinct style of equipment, designed to harmonize with the finish of the rooms and to feed the employees at the most economical cost of service and preparation of food products. The gas-range installed in the kitchen does away with the handling of coal and ashes and the steam cooking-kettles eliminate the cost of fuel. The section of the hood over the kettles is lined with copper and the condensing steam, which drips back into the pan holding the kettles, runs off through the gutters and outlets provided for it. The kitchen refrigerators are lined inside with white enamel, and there is also a refrigerator for freezing the garbage, to prevent escaping odors in removing it from the building. The dining-rooms are provided with equipments for serving hot and cold foods. They are so arranged that employees passing in front of the counter are served direct, and the cost of waiters eliminated. The dish-washing pantries are so located that the employees, after finishing their meals, can conveniently collect their own dishes and deposit them upon enclosed counters as they pass out. A special pantry, also, is provided for the service of officers and guests. In the employees' dining-room, the counter is so arranged that employees who wish cold foods, such as sandwiches, salads, milk, etc., can get them at

one end of the counter and those who wish hot foods can get them at the other end; while the entrances and exits are so planned that all possible confusion is avoided.

The problems involved in the interior illumination of workrooms are economic as well as humanitarian, for it has been found that greater attention to questions of human welfare results in greater mercantile or economic efficiency. With this fact in mind, and after many careful tests made under actual working conditions to determine the best methods of eliminating glare, objectionable shadows and discomforts occasioned by direct-lighting units, the system of indirect lighting, or illumination by diffused light was adopted, as the one approaching the nearest to daylight in its results. The general working offices are lighted by single-unit fixtures, each containing one 250-watt tungsten lamp, consuming only ten per cent. more current than is used by four 16-candle-power carbon lamps. Each fixture is fitted with a one-piece corrugated glass mirror reflector, which throws the light on the ceiling and gives an even illumination on the working plane throughout the offices. The ceiling is painted a soft cream color in a dull finish, this color being selected as the one showing the minimum amount of dirt. The fixtures are so arranged that it is practically impossible to partition off a space without leaving at least one fixture in the room formed by the partitions; and this is the reason for using the single-light unit. The halls, fire-towers, stairways, etc., are lighted by direct lighting, translucent reflectors being used. The mechanical department is lighted by arc-lamps, with double globes in some places and tungsten lamps in others, fitted with opaque or translucent reflectors, as required.



INDIRECT ILLUMINATION IN CIRCULATION DEPARTMENT.
THE HOME OF THE CURTIS PUBLISHING COMPANY.
Edgar V. Seeler, Architect.

A word may be said regarding the materials used in the interior finish, especially in the publication building. In the entrance lobby the flooring is laid with a field of Georgia creole marble, and with borders of Greek Pentelikon and Nor-

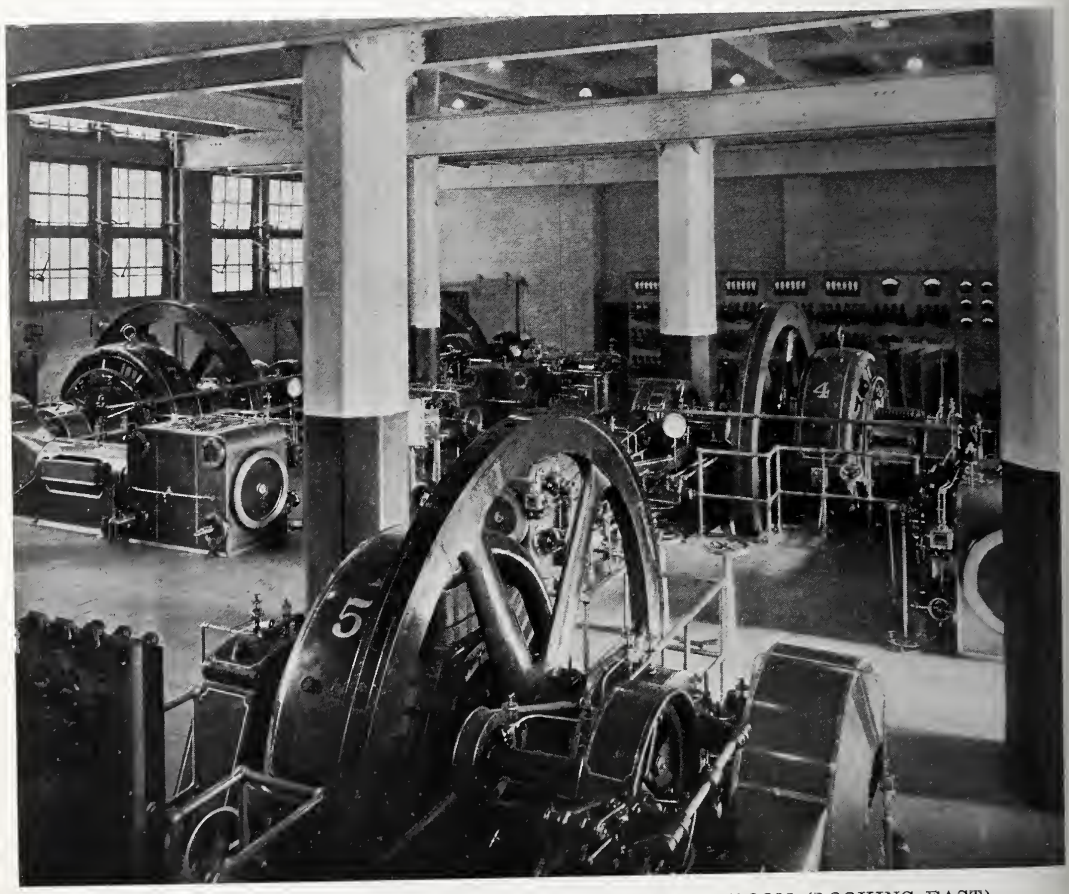
wegian white marble, the former coming from the old quarries near Athens and the latter, which is of particular beauty, from southern Norway. Pentelikon marble is used for the side walls also and the ceiling is of stucco; while the lamp-standards are fashioned with Carrara marble and have alabaster light-fixture bowls. The interior finish of the remaining rooms of this building, with the exception of some of the private offices, board-room, private dining-room and rooms of the sixth, ninth and tenth stories, is quartered oak, fumed or antique-finished. In the sixth story there is a white-enameled trim and mahogany doors and furniture and in the ninth and tenth stories a gray paint finish. The president's office in the southeast corner of the fourth story is paneled to the ceiling with French walnut. The cornice and mantel pilasters are beautifully carved, the mantel itself being of Caen stone. The ceiling is stucco in delicately fashioned patterns, the lighting fixtures of alabaster set in bronze and the furniture inlaid with different woods and trimmed with brass. The private editorial offices in the sixth and seventh stories, also, have especially elaborate finishes, the former a white enamel on cherry, with mahogany doors and furniture, and the latter richly figured Italian walnut, paneled to the ceiling. In this room, set in the paneling of the north wall and also over the mantel shelf, are fine copies of two of Rembrandt's paintings, one, about 8 by 4 feet, being "The Syndics of the Cloth Hall" and the other the portrait of Elizabeth Bas. The interior design of the board-room in the southeast corner of the eighth story is of interest, the side walls being covered with heavily paneled and elaborately carved English oak from floor to ceiling, the latter executed in stucco.

The interior finish of the outside walls of the circulation department occupying the second, third and fifth stories consists of the buff-brick lining itself; the side walls of all public hallways and stairways in the convenience belt are faced with gray Tennessee marble, as are also the walls of all toilet-rooms. The public elevator shafts are lined with white enameled brick. For the floor coverings many different materials were used, such as maple, quartered oak, wood blocks, various compositions, cork tile, red clay tile, decorative faience tile, marble and concrete.

The convenience belt, especially applicable to buildings of this character, which have to partake of both the office building and the factory, is separated from the publication and manufacturing buildings by two brick fire-walls, 22 feet apart and parallel to the Sixth Street façade. The purpose in locating all conveniences in a belt extending across the entire width of the building is two-fold: to prevent the communication of the noise of manufacturing from the mechanical to the publication department and to provide a continuous fire-wall between them. It contains the elevators, toilet-rooms, stairways, shafts for steam pipes, water pipes and electric wires, heating and ventilating ducts, and, in fact, with minor exceptions, all the connections of the mechanical service of the entire building. This clever arrangement makes available also, a maximum amount of the best lighted and ventilated areas, besides being convenient in plan and economical in space. In order that it might contain also the overhead electric elevator machinery, the heater-coils, ventilating exhaust-fans, etc., this section was extended one story above the roof.

In the manufacturing building the basement is used for magazine-paper storage, with receiving platforms in a mezzanine story; the first story for the mailing division, with ample shipping platforms, to which three spiral chutes, made of ¼-inch thick plates, lead from the second story; and the first mezzanine floor for mail storage, men's locker and shower-bath rooms and a toilet-room for women. The second story is entirely occupied by the press-room of the Saturday Evening Post; the third and fourth stories by the binderies, with the office suite of the superintendent of the mechanical department in the southeast corner of the latter; the fifth story by the circulation department and a well appointed photographers' room in the north or the Sansom Street side, a locker-room,

pneumatic-tube exchange and telephone-exchange in the middle section and a press-room in the southern or Walnut Street side. The occupancy of the sixth story is the same, except that the tube and telephone-exchanges are omitted. The seventh and eighth stories are occupied by press-rooms. Two larger conveyors carry the magazines from the binderies to the mailing division. The north side of the ninth story is occupied by the circulation department, electrical repair-room and proving press-room; the central section by the melting and casting-room and the blocking and proving-room; and the south side by the composing-room. On this level a bridge crosses the interior court from the composing-room to the proving press-room and in the middle section of this story there is also a gallery over the blocking and proving-room which is used for locker space and storage. The area of the tenth story, which is about two-thirds that of the ninth, has its northern division given up to the engraving department, elevator machinery, fan-rooms, men's locker-room and office; its middle division to engraving and its southern section in part to the recreation room, mentioned above, for the women employees. This latter room is about 30 by 130 feet in size, and intended for noon exercise. It is enclosed in winter and has a mammoth fire-place and comfortable lounging corners. A very interesting detail in brick

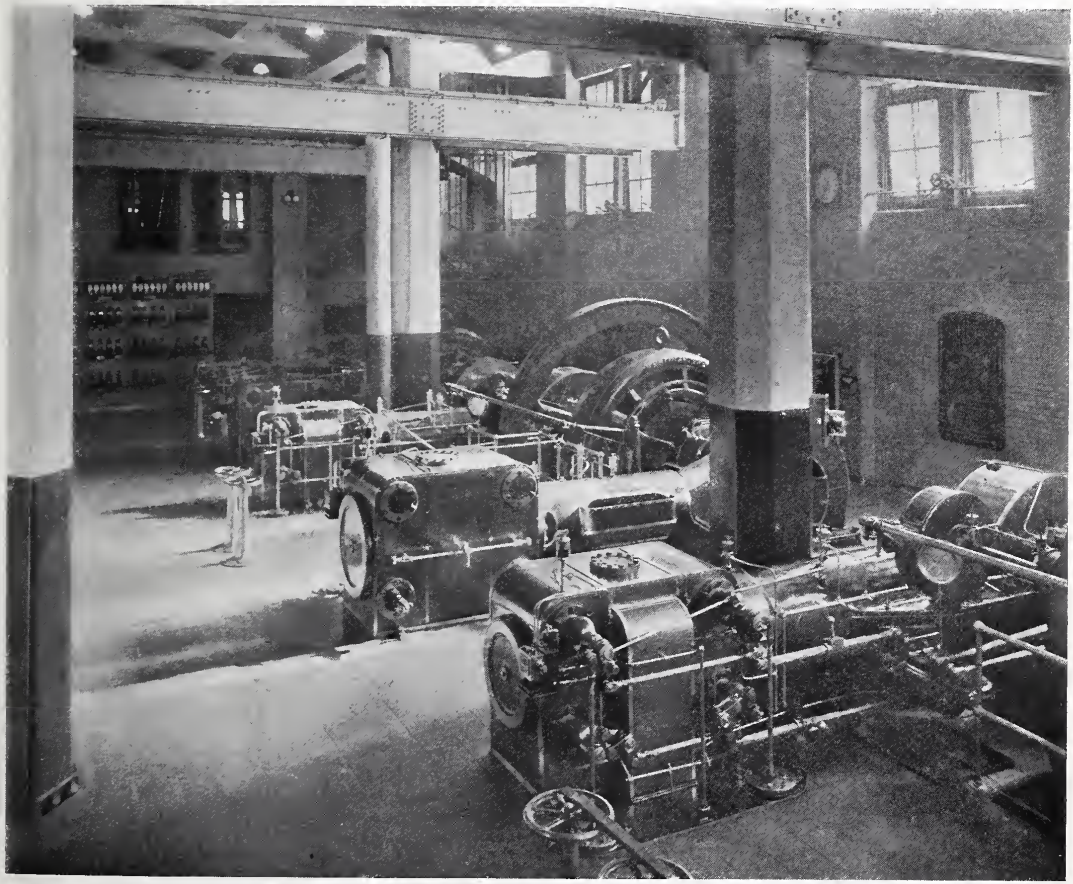


THE ENGINE ROOM (LOOKING EAST)

Philadelphia, Pa.

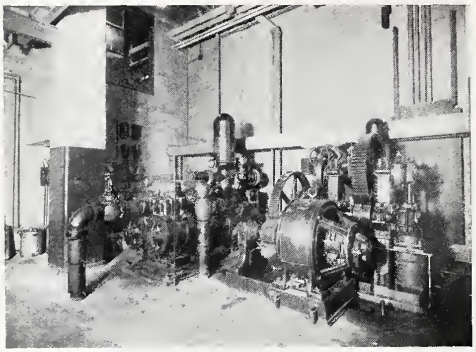
and white stone frames the fire-place. The walls were finished to a height of about 7 feet with red brickwork and above that, in the barrel-vault ceiling, with gray-colored rough plaster. In summer it is thrown open through wide casement windows upon a roof promenade overlooking Washington Square and the city to the south, and it is approached by the wide incline mentioned above, leading from the tenth-story level of the publication building.

In the power building the engine-room, about 86 feet by 86 feet in plan and free from all piping, occupies the entire first story with the exception of the extension on the west containing the fire-tower stairway, toilet-rooms, store-rooms, elevators, etc. Its floor is 6 feet below the sidewalk grade and its ceiling about 27 feet high, and on the west side there is a visitors' gallery. A wire-glass-enclosed metal spiral stairway leads to the office of the superintendent of the mechanical department in the story above. All windows in this room and on the entire Sansom Street side of the plant have metal frames and sash glazed with wire-glass and pivoted at the sides to open by levers. The side walls are faced with gray brick and the flooring is of 8 by 8-inch red tile laid in black cement and bordered with a brass wall-base. Three overhead cranes, of 10-ton lifting capacity each, serve to lift and move any piece of machinery from one position to



OF THE CURTIS PUBLISHING COMPANY.

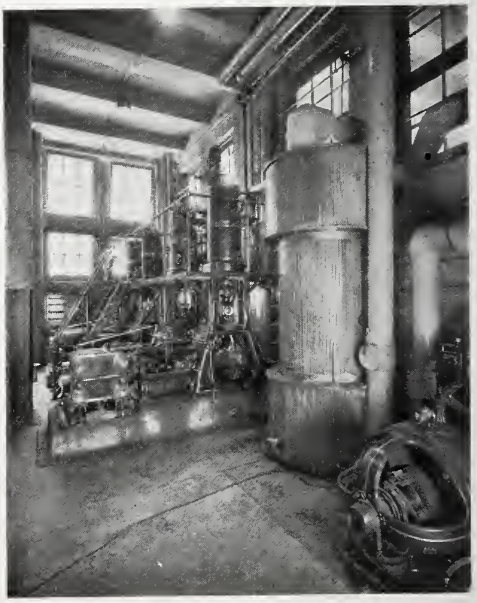
Edgar V. Seeler, Architect.



PUMP ROOM—FIRE AND FEED PUMPS.

another. The pump-room, 25 by 40 feet, is on the same level and adjoins the engine-room on the east. The second story contains the ash-car runways with their hand-cars and tracks, and the carpenter-shops, storerooms, boiler feed-pumps, heaters and fans. The boiler-room floor is on the third story floor level, two full stories in height and the same size in plan as the engine-room, the upper part of the room being occupied by the large hopper-bottom coal-bunker, extending the full length of the boiler-room. The fifth story is occupied by an extension of the circulation department from the publication building; the sixth and seventh by an outside electrotype company; the eighth by the job press-room; and the ninth and tenth by another engraving company with offices on the ninth and studios on the tenth mezzanine stories. In the half-width western extension of this building there are numerous mezzanine floors, making a total there of twenty stories. The adoption of the "double-deck" type of power-plant, in which the boilers are situated over the engines, affords the necessary amount of space for the shipping department of the street level and for the interior light-court.

From an architectural-engineering point of view, perhaps the three most interesting groups of details of the new buildings of the Curtis Publishing Company are: those connected with the foundations; those necessitated by architectural considerations, such as the recessing of the Sixth Street façade for the marble portico and the provision of the large unobstructed space in the entrance lobby of the publication building, planned to receive a mural painting, about 50 feet long and 13 feet high; and those pertaining to special and unusual requirements in the power-house.



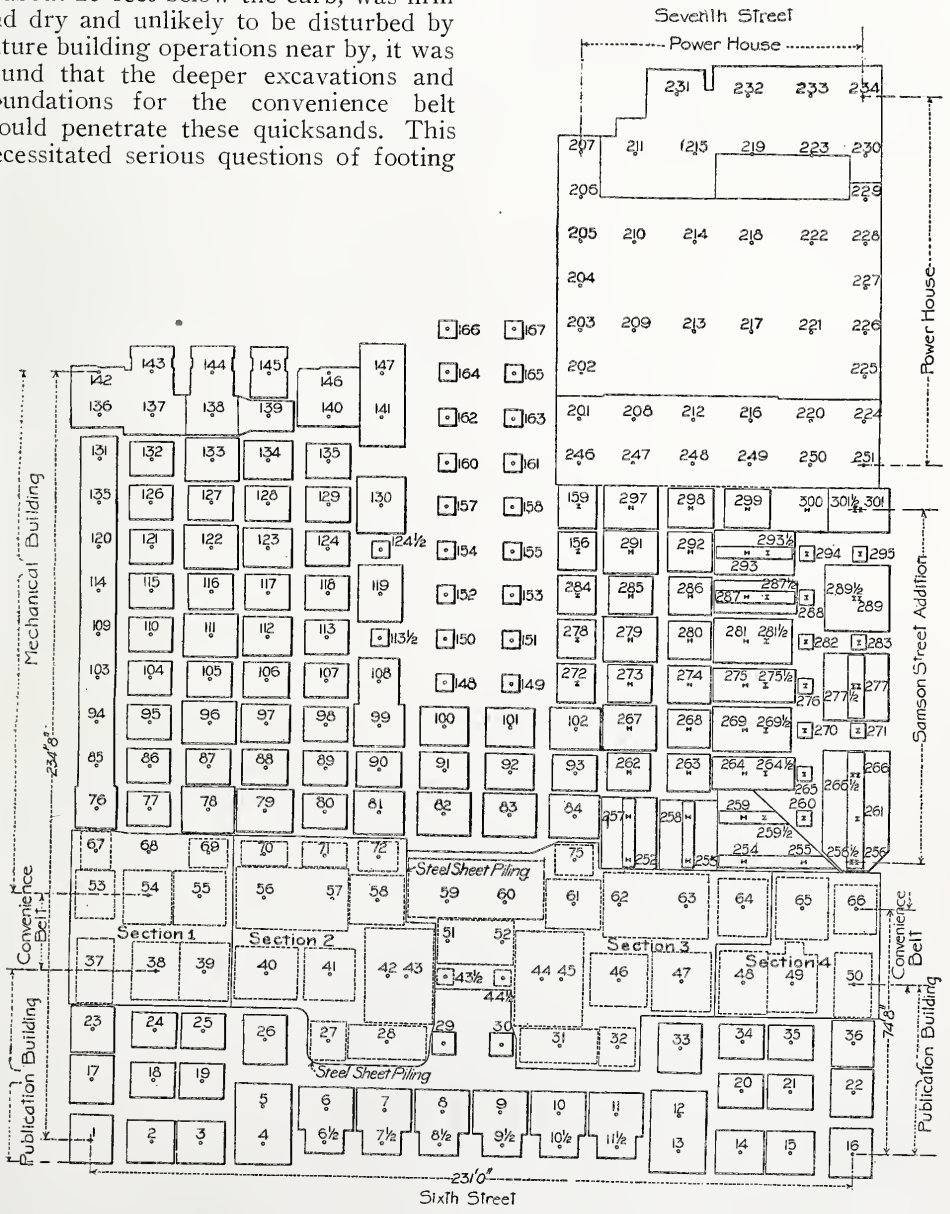
Pump Room—Ice Machine.
THE CURTIS BUILDING.



THE BOILER ROOM.

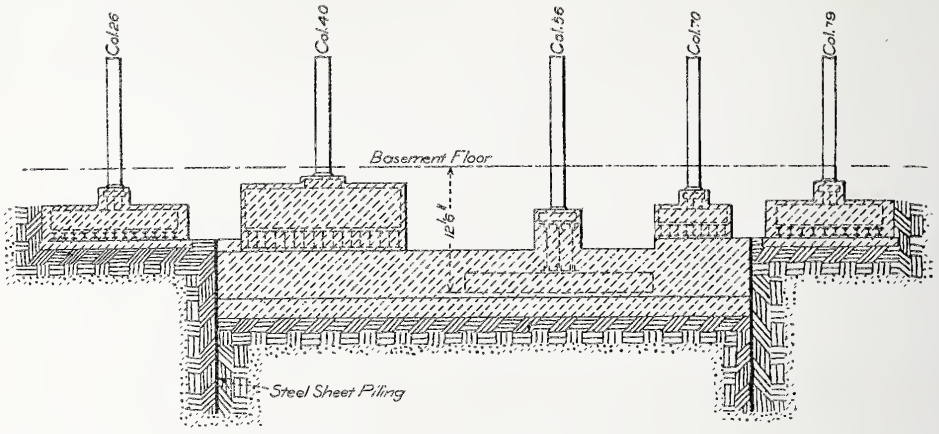
Nothing connected with the construction of a heavy building gives the architect, the engineer and the contractor more concern than the treatment of the foundation-beds in soils of varying and uncertain degrees of resistance to superim-

posed loads. There were some real difficulties met with in laying the foundations of these buildings, but they were overcome by clever and comparatively simple methods. Preliminary soundings indicated quicksands at certain depths on certain portions of the site; and although the soil above ground-water level, which is about 25 feet below the curb, was firm and dry and unlikely to be disturbed by future building operations near by, it was found that the deeper excavations and foundations for the convenience belt would penetrate these quicksands. This necessitated serious questions of footing design and foundation construction, going down 7 feet below ground-water level. Accordingly, to preserve the inherent capacity of the sand to safely sustain the required loads in this particular section of deeper foundations, it was confined and protected from lateral disturbances by enclosing it within deep perma-



Courtesy of The Engineering Record.

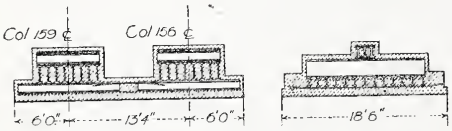
PLAN OF CONCRETE FOOTINGS FOR GRILLAGES.



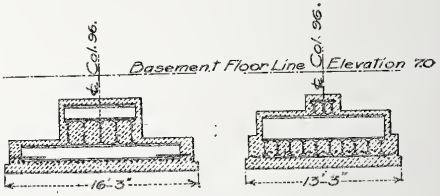
Courtesy of The Engineering Record.

FOOTINGS ENCLOSED BY PERMANENT STEEL SHEET PILES.

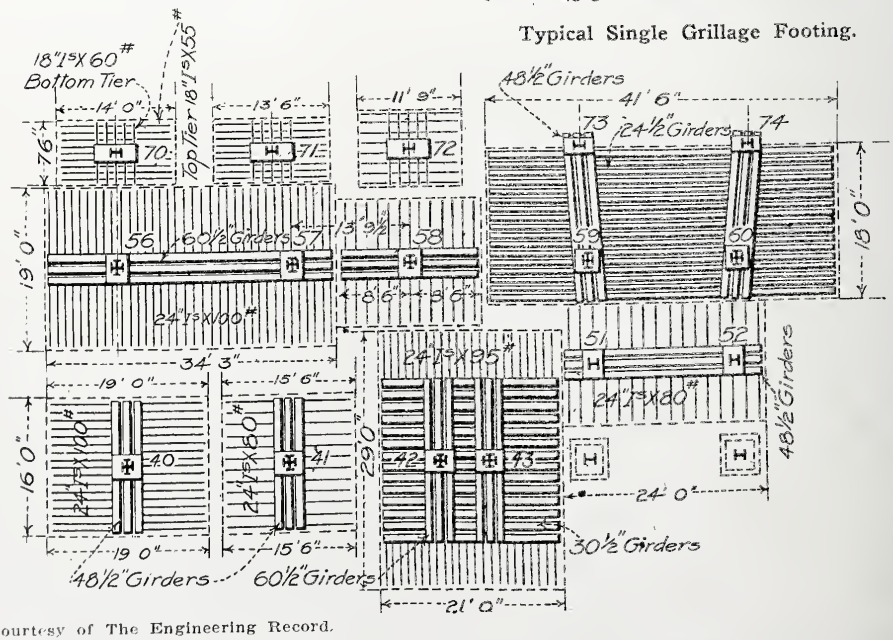
nent steel sheet-pile walls or coffer-dams and covering it with monolithic slabs of concrete from 2 to 3 feet thick. Thus the foundation grillages supporting the columns of the convenience section are enclosed by a cofferdam 244 feet long, from 44 to 71 feet wide and 33 feet high; and to facilitate the construction, this en-



Double Grillage Footing.



Typical Single Grillage Footing.



Courtesy of The Engineering Record.

REGULAR AND SPECIAL GRILLAGES IN PUBLICATION BUILDING.

closure was divided into four sections by three transverse rows of sheet-piles. The accompanying diagrams show the plan of the concrete footings for foundation grillages, a section through some of the footings enclosed by the permanent steel sheet-piling or cofferdam and some of the regular and special grillages: and the photograph, taken November 15, 1909, is a view looking north and showing section 2 of the cofferdam, the upper edge of the dam itself around this section and the large grillage foundations for columns numbered 40, 41, 42 and 43 on the footing and grillage diagram.

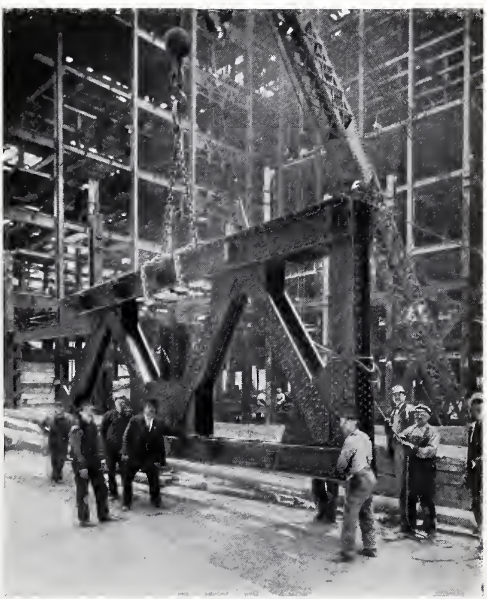
The alcove mentioned above for the mural painting in the main entrance lobby is spanned at the second-story floor level by a box-girder 41 feet long, 3 feet 4 inches deep and of a relatively greater weight than other similar girders in the building, occasioned by its limited depth, due in turn to clearance requirements; and it was just at this point that there was offered to the architects and engineers a choice of methods in structural design and one of those constantly recurring opportunities for the exercise of nice judgment. The two lines of columns omitted in the first story under this box-girder were not restored above the second-story floor level, the panels being maintained the full width from the second story to the top of the building and the floors of all the stories above the second being supported on lattice-girders, 41 feet long and 7 feet 5 inches deep, between the two lines of columns supporting the box-girder. The result is a type of conservative construction which, in the case of fire, and of even serious injury to one or more girders supporting the ordinary loads of but one story, would not involve large portions of the building in any failure such as might result from the failure of a single heavy second-story girder supporting excessive concentrated column loads from seven or eight stories above. Other advantages of these deep lattice-girders over plate-girders are their lightness, the opportunities they offer of carrying not only each main floor on their top flanges, but also the floors of the convenience-belt mezzanine stories on their



COFFERDAM AND FOUNDATION GRILLAGES.

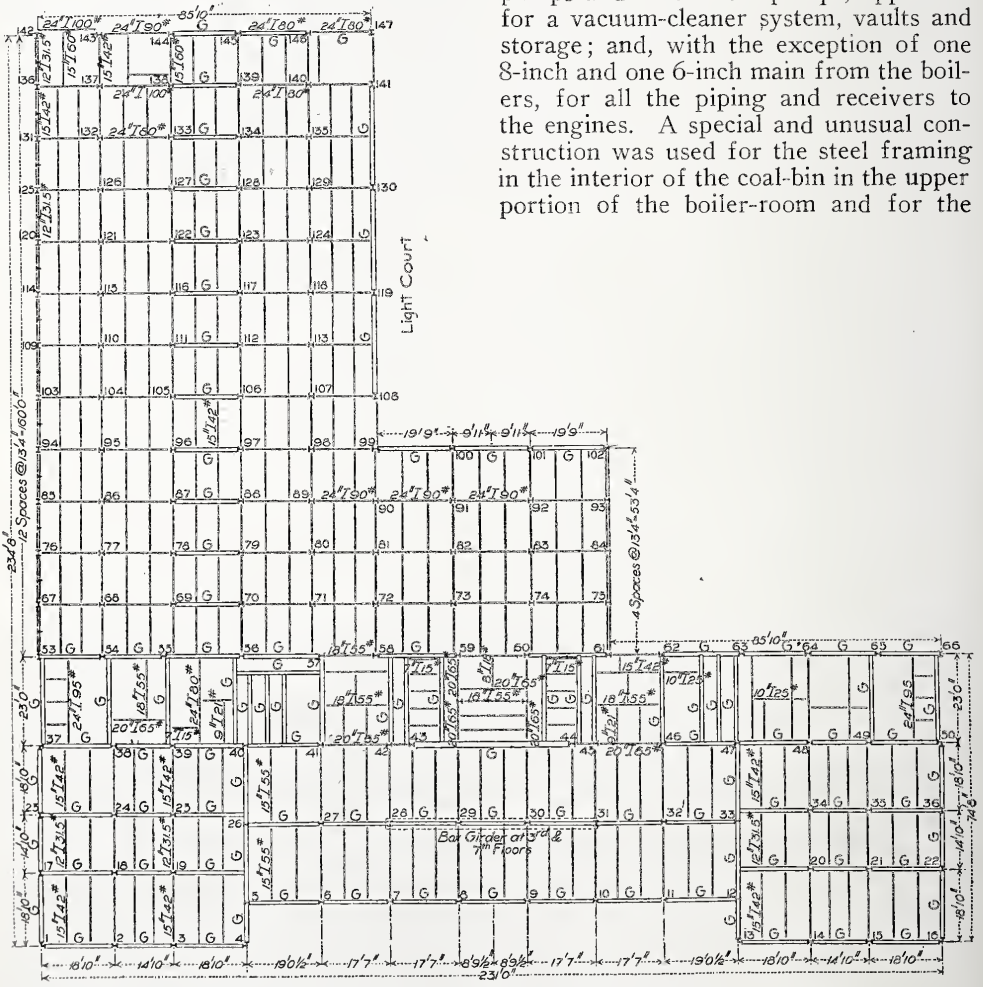
lower flanges, and of the possibility of bonding through their latticing the brick fire-walls, which at the same time entirely enclose and protect them instead of splitting them into the two thin brick faces resulting from the use of plate-girders. The illustration shows part of a large lattice-girder ready to be hoisted into position.

Only one or two of the many interesting and rather unusual structural details of the power-house can be referred to in this article. As already mentioned the



PART OF DEEP LATTICE GIRDER.

boiler-room with its notably good ventilation, abundance of light and ample space around all boilers and piping, instead of being in the basepent has its floor at the third-story level; while the coal-bin story is just above it, the ash-floor below, and the engine-room and



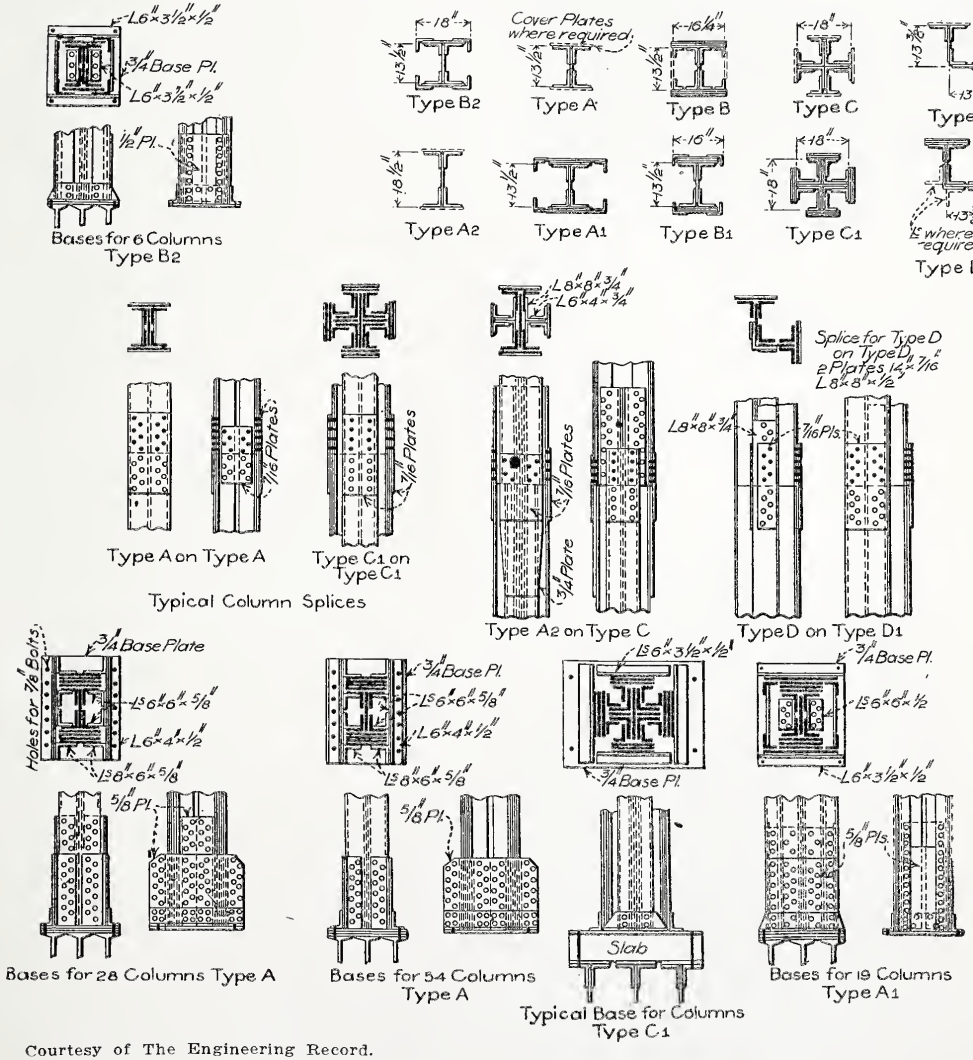
Courtesy of The Engineering Record.

BEAM PLAN, THIRD TO NINTH FLOORS.

clear of the column foundation themselves and by placing them on a concrete slab resting on I-beams supported on piers set between the main column footings. The space under the engine-room, planned between the grillages, girders, foundation piers, etc., is used for oil-pumps and feed-water pumps, apparatus for a vacuum-cleaner system, vaults and storage; and, with the exception of one 8-inch and one 6-inch main from the boilers, for all the piping and receivers to the engines. A special and unusual construction was used for the steel framing in the interior of the coal-bin in the upper portion of the boiler-room and for the main pump-room just above the foundations which rest on a dense fine wet sand, 24 feet below grade and one foot above ground-water level. All vibrations transferred to the engine foundations are prevented from being carried to the main columns and thus to the upper floors, by constructing these foundations entirely 1,200-ton reinforced-concrete coal-bunkers and metal hopper-bottoms. The coal, delivered to the basement bins from wagons in the court and then raised by metal-encased elevating and distributing conveyors, is brought into the boiler-room a little below the fifth floor-level, fed down through one of the hoppers located

in front of each boiler, by emptying into one of two traveling chutes designed to weigh and hold 1,000 pounds each, and discharged onto the concrete floor in front of the boilers. The latter are fired by hand and the ashes discharged through them, receive the ashes and cart them away.

In regard to the mechanical equipment of this interesting group of buildings, only the briefest summary of the most significant features and results can be

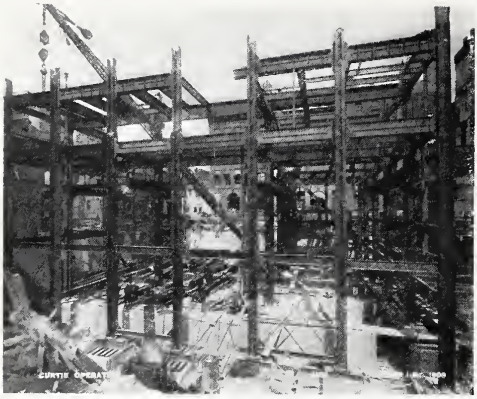


Courtesy of The Engineering Record.

REGULAR AND SPECIAL COLUMN SECTIONS, BASES, AND SPLICES.

hoppers under the grates and dumped into the hand-cars running on tracks laid on the ash floor below and leading to large ash-bins on the court-yard side. These bins have hopper-shaped bottoms and are placed at such a height above grade that ash-carts can be driven under

presented. There are enough interesting facts, did space permit, for a lengthy treatise on each installation. The power-plant may be described very generally as a 2,250-kilowatt, equal to 3,319 horse-power, plant using exhaust steam for heating; an engine-room and boiler-room



STEEL FRAME OF POWER BUILDING—SHOWING INDEPENDENT FOUNDATION FOR ENGINE ROOM.

designed to permit the future installation of an additional 1,200-kilowatt capacity; remote control for the electrical apparatus meters on all service lines and feed-water lines and circuits to all departments; and complete arrangements for the keeping of accurate and separate departmental operating expenses.



POWER BUILDING FROM COURT, SHOWING COAL-BUNKER FIRING COAL CONVEYORS, SMOKE-STACKS, ASH BINS, BRICK FACING ON COURT SIDE, ETC.

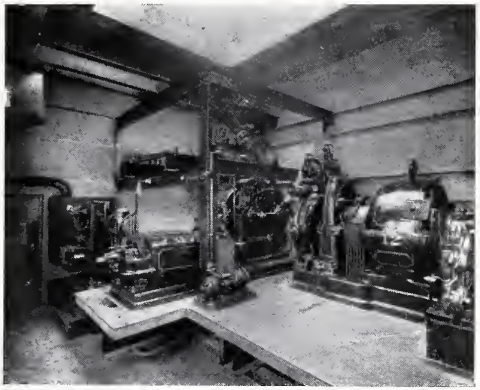
The seven units of various sizes into which the present total capacity of the plant is divided and which permit various combinations for handling the load most economically, are all run at 150 revolutions per minute, and consist of non-condensing engines, direct-connected to direct-current generators. They consist of one 18 by 30 by 32-inch cross-compound engine driving a 500-kilowatt generator; three 16 by 26 by 32-inch cross-compound engines, each driving a 400-kilowatt generator; two 12 by 20 by 30-inch cross-compound engines driving 200-kilowatt generators; and one 14 by 24-inch simple engine driving a 150-kilowatt generator. Four 350-horse-power and one 300-horse-power boilers furnish steam at 180 pounds and 125 degrees superheat and space is left on the opposite side of the boiler-room for a duplicate set.

The surface of the superheaters consists of a cold-drawn seamless steel tube on the outside of which cast-iron rings are shrunk and inside of which a displacing core is inserted. This design insures a uniform temperature at the superheater outlet; an important feature, as troubles resulting from the use of superheated steam are largely due to fluctuating temperatures. The superheater is located in the first pass of the boiler setting where it is heated by the furnace gases after they have passed the first bank of tubes. The steam is brought to it through the regular boiler outlet, this connection having no valves, cocks, or other appliances requiring attention. The steam at the superheater outlet, which is under 180 pounds pressure and at 120 degrees superheat, loses about 20 degrees of this temperature before reaching the throttles of the prime movers, thus effecting a decreased steam consumption in the engines by its use. There are two steel smokestacks, 120 feet high and 8 feet 10 inches diameter, lined with fire-brick and carried on special steel supports, and two economizers, saving 8½ per cent. in cost of fuel, placed on the boiler-room ceiling, and to supplement the natural draught by a forced balanced draught, there is not only a powerful blower to deliver air under the grates,

but also a steam blower which may be used instead of the former as a second source of mechanical draught, located at each ash-pit. The accompanying illustration shows the two smokestacks on the court side of the power-house.

An outside-packed steam pump and a motor-driven pump, supplemented by injectors, handle the feed-water, one only being used ordinarily but both being automatically put into service whenever the load increases sufficiently to make more than one necessary to maintain the water in the boilers at the required level. On the feed-water supply there is a meter with automatic recorder attachment. A hot-water heater furnishes the feed-water to the pumps, which deliver it to the two fuel economizers. One of these serves three boilers and the other two boilers, the flues and economizers being so planned that the gases can be by-passed around and made to flow into the stack direct. On the boiler-room floor, back of the boilers, is a 650-gallon tank for oil storage; and from this the oil flows to the engines by gravity and from them to a settling tank and filters located in the basement, where there is an additional 750-gallon supply of filtered oil. From this lower point it can be pumped to the upper storage tank.

The problem of heating and ventilation for a group of buildings, the cubical contents of whose rooms amounts to 10,000,000 cubic feet, is an important one. It was decided to install throughout, except in the power building, the indirect system of heating and ventilation, to be used for all ordinary conditions; and to supplement this with a direct system of heating during severe weather. For the former the engine-exhausts are led to the roof through an exhaust main, 36 inches in diameter and through a branch, 28 inches in diameter, along the roof to the heating stacks over which fresh outside air, previously washed, is drawn by electrically controlled fans and then forced to the various rooms through metal ducts. The vacuum system is employed for both the indirect and the direct system of heating, which takes its steam from the same exhaust-main supply and serves the radiators with a one-pipe system and with vacuum-pump connections to the radiator valves. When the temperature of any room falls below the desired degree, the radiators are put into service by means of a thermostatic control. In case several of the engines are not running or the power load is not sufficient to furnish enough exhaust steam, live steam is turned into the system through reducing valves. The returns carrying the condensed water collect into a basement hot-water tank



ELEVATOR MACHINERY TOP OF SHAFT.



STORE SERVICE TUBE ROOM.

whence they flow to the feed-water heater. A small fan in the basement of the power building ventilates the engine-room by drawing down the air through openings around the columns. There are over 300 thermostats installed throughout the manufacturing and publication buildings, placed at convenient locations, each controlling a certain number of diaphragm valves on the direct radiators. The temperature of the heated air is controlled by these thermostats, inserted through the walls of the warm-air shafts, and the air is maintained ordinarily at a temperature of about 70 degrees, it being understood that this air is primarily for the purpose of ventilation. The compressed-air for the operation of the thermostatic system is furnished by two large electric air-compressors which operate alternately. Cold drafts from the skylights in the rooms in the upper story are prevented by steam coils, placed so as to intercept the down drafts. These coils are controlled by pneumatic switches of the push-button type, accessible to the occupants.

The cold-water service is maintained by two motor-driven triplex pumps with a capacity of 300 gallons of water each per minute, against 198-foot head, and by four pressure-tanks; and the hot-water service is supplied from two hot-water tanks.

Conceding the fact, now so generally recognized by efficiency engineers and industrialists, that safe drinking water is a powerful profit factor, by steadying individual employee output, this plant is consistently equipped with recognized apparatus for water sterilization by heat. In addition, therefore, to the refrigerated water for the drinking fountains, all water for kitchen and pantry use, including the dishwashing machines, is heat sterilized.

The refrigerating and ice-making equipment for cooling the drinking water and making the ice for the kitchen service is located in the main pump-room and is very complete. For the refrigerating plant there are two 20-ton machines, each with two vertical single-acting ammonia compressors of 9-inch bore by 12-inch stroke, driven by a horizontal direct-connected steam cylinder of 8-inch bore by 12-inch stroke; three coils of 1¼ and 2-inch pipe ammonia condenser, twelve pipes high and 19 feet long; one ammonia-receiver and one oil-separator; one 25-ton shell and tube brine-cooler; two brass-fitted vertical 5 by 7-inch triplex brine-pumps, direct-connected to 5-horse-power motors two water-coolers, each ten pipes high and 10 feet long, together with pan; two brass-fitted vertical triplex 4 by 5-inch ice-water pumps, direct-connected to 3-horse-power motors. There is also one ½-ton freezing system, consisting of a tank 6 feet 3 inches by 3 feet 9 inches by 28 inches, containing fifteen 50-pound cans for ice. A deep-well pump drawing its supply from an artesian well driven under the building furnishes the cooling water for the ammonia condenser; and in case of failure of the well, the city water is let into the system by an automatically operated valve.

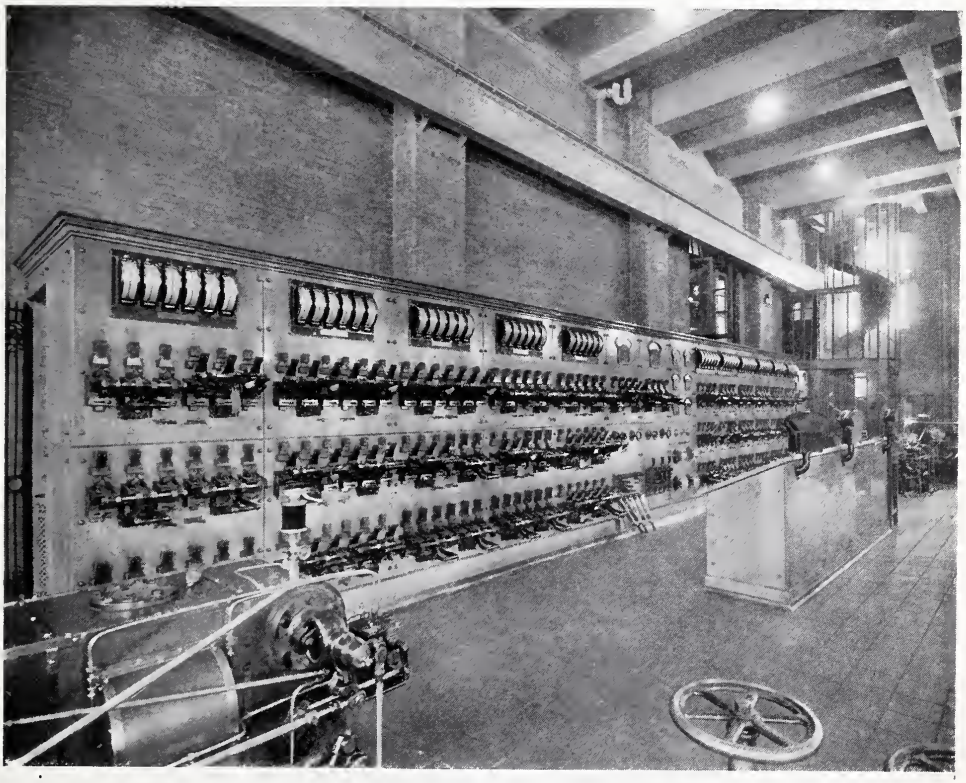
There are seven passenger elevators, six in the convenience belt and one in the power building; and six freight elevators, two in the convenience belt, one in the Sansom Street middle division, one in the power building and two in west end of the manufacturing building. There is also a sidewalk elevator, a basement lift and three dumb-waiters. The passenger elevators are provided with interlocking gate devices which prevent the opening of the enclosure door until the car is opposite and which locks the operating device in the car as soon as the enclosure door is opened. All the elevators have overhead installation and all passenger elevators are provided with the flash-light system for signaling. All operate on 220 volts, direct current.

There is a complete vacuum-cleaning system, serving all parts of the buildings, and operated by two rotary vacuum pumps, each with a capacity of discharging, with a 10-inch vacuum in the system, about 250 cubic feet of air per minute.

In regard to the general electric equipment and distribution, 220 volts is the power used for running the presses, elevator, pumps, motors, etc., and 110 volts for the lighting. For the latter current the usual three-wire system is used

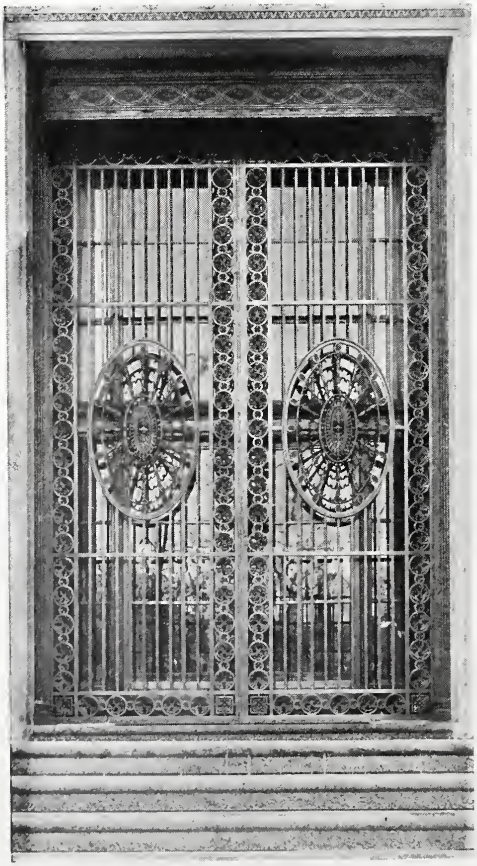
with balancer sets and with a current generated at 220 volts. On a panel close to each machine are the circuit-breakers, and rheostats, handled from a central benchboard. The two groups of panels of the main 40 by 10-foot switchboard are subdivided into those for the power circuits on the right, those for the lighting circuits on the left and those for the balancer sets and instruments on the three central panels. There is a watt-meter for each machine and in both the positive and negative bus-bars; and to indicate the unbalanced load, an additional instrument. In order that each department may determine its proportionate expense for power and light, the circuits to each one are metered; and in order to determine any grounding of wires, an ammeter switch throws the instrument to either the positive or negative side. In case of accident to the electric equipment, putting it out of service, an auxiliary switchboard is automatically thrown into service by a no-load release, and as this board is fed from the city electric service and is connected with emergency lighting circuits in all stairways and in the engine-room and boiler-room, these parts of the building can never be shut off from artificial light.

In regard to fire-proofing, fire-resistance, and fire-protection, all the buildings and all their parts are planned and constructed not only for the protection of the building itself and its contents, but also for the protection of the employees and visitors. In addition to the solid brick fire-walls separating the great divisions of the plant and completely cutting off each section from the others by the closing of the hollow steel or metal-covered self-closing fire-doors of occasionally necessary openings, there are at present four tower-fire escapes, those at each end of

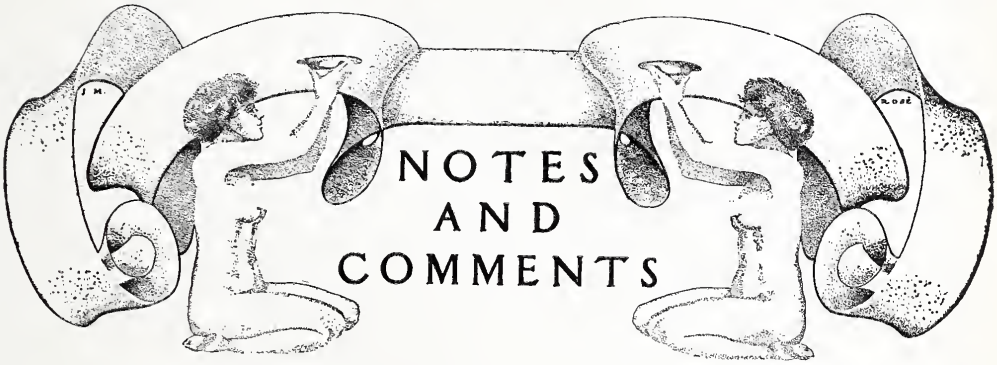


The Switch Board.
THE HOME OF THE CURTIS PUBLISHING COMPANY.

the convenience section enclosing two separate non-interfering stairways reached at every landing through fire-doors from outside areas which connect with both the publication and the mechanical buildings. There is one also at the Walnut Street side of the mechanical building and one at the northwest corner of the power building. Outside automatic sprinklers are installed over all the wall-openings of alternate stories, beginning with the second, on the Sansom Street side of the entire plant except in the fire-tower and over the openings of the recessed southwest corner of the power-building and there are rolling fire-curtains on the Sansom Street side of the publication building. Holding in reserve 10,000 gallons of water, there is a large iron fire-tank on the roof furnishing an ample volume of water in case of need. There is also a 750-gallon-per-minute fire pump and numerous stand-pipes with reels of hose on every story and with fire-nozzles on the roof, always ready for service. The house-supply pumps are also so connected as to be available for fire service in case of necessity. Outside the building, on the three streets, there are three plugs for the fire-engines, with connections also directly into the stand-pipes and sprinklers; and each has three openings, two of which are for the steamers and one for a high-pressure service. For the numerous fireproof and burglar-proof vaults, eighteen sets of 800-pound vault doors and specially designed vault bridges are installed.



The Entrance Gates.
HOME OF THE CURTIS PUBLISHING COMPANY.
Edgar V. Seeler, Architect.



MUNICIPAL ART COMMISSIONS.

Milwaukee and Pittsburgh have recently established Municipal Art Commissions, and Philadelphia's Art Jury—finally appointed, more than four years after the passage of the act which authorized it—has elected a very progressive and energetic secretary. This is Andrew Wright Crawford who, as secretary of the local City Parks Association, has gained a national reputation for bringing things to pass. As the Philadelphia Art Jury has exceptional powers, the situation is encouraging. All this makes a considerable batch of art commission news for one month. The Milwaukee commission consists of seven members—two architects (William Schuchardt and George B. Ferry), two painters and, as ex-officio members, the president of the Park Board, the president of the Museum Board and the president of the School Board. The latter has been made chairman of the Commission. Of the Pittsburgh commission, the chairman is John W. Beatty, director of the department of fine arts of the Carnegie Institute. The ex-officio members are the mayor and the director of public works, and the appointees by the mayor, are, in addition to Mr. Beatty, A. B. Harlow, a well known architect; Henry W. Goodwin, the dean of the architectural department of the Carnegie Technical Schools; W. C. Mellon and Alfred B. Orth. The Pittsburgh commission is unique in having, also, two members from another city—New York. These are John W. Alexander, president of the National Academy of Design, and Henry A. MacNeil, president of the National Sculpture Society. This extending movement among cities, to secure fidelity to artistic standards in the public work, is an encouraging sign of the times.

NEW YORK'S CIVIC CENTER.

The choice at last of a site for the new Court House in New York—though in itself a sufficiently interesting matter after the years of discussion—gains its greatest interest from the circumstance that it will add another important structure to the growing assemblage of public buildings and thus bring nearer to realization the possibility of a civic center. Such, at all events, is the popular view of the matter, the public following the lead of the committee of the Board of Estimate who, in reporting on the site, declared that they had "kept well in mind the need of a civic center in the heart of the city, into which a court house of monumental design would naturally fit." The site and its surroundings have been so generously pictured in the newspapers that there is no occasion for exact description here. It need only be chronicled that while the Board as a whole have officially adopted the proposed site for the Court House, and the Court House Commission has appointed Walter Cook as its advisory architect, the Board postponed, for consideration at some future time, the matter of a civic center. It ought also, perhaps, to be said that the civic center, if it is ever realized as now contemplated, will probably look better in the reality than it does in the diagram. The bigness of the buildings which so often impress—not to say, oppress—the pigmy observer, dominating the picture before him and diverting his attention from symmetry of ground lines, serves also to screen a lack of symmetry and to distract him from contemplation of what may be called the civic design of a scheme. And yet it is probable that no trained observer would be able to look upon the civic center as it is proposed

without feeling deeply its shortcomings. So vast a sum expended by so rich a city to get three successive open spaces, separated by single blocks, and each a civic center unrelated to the other and having independent axis of its own, would make a strong plea for comprehensive and far-sighted city planning. If only one building had been placed a block away, and another turned a little differently, what opportunities there might have been! But having been without that far-sighted planning until property values set limitations even to the imperial city, the plan is probably as satisfactory as any that could be worked out in the somewhat restricted section in which a civic center is now a practical possibility. Such a result was to be expected, however, from the deliberations of the architects to whom the committee referred the subject: Grant La Farge, Walter Cook, Grosvenor Atterbury, William M. Kendall, H. V. B. Magonigle and Egerton Swartwout. To their gratuitous service, as the committee report declares, the city is greatly indebted.

FEDERAL ART COMMISSION.

The report of the Federal Commission of Fine Arts, lately made to the President, for the first year of its existence, has been awaited with some interest. The public has heard little about any activity on the part of the Commission, and even the members of the professions who were most called on to aid in securing the legislation which authorized its appointment have had scant knowledge as to what it has, after all, been able to do. It now appears that during its first fiscal year, which ended July 1, 1911, forty-one questions were acted upon, the money expenditure involved in the cases being about $16,000,000. In each instance, action was taken by the Commission as a whole, but usually after committee investigation and report. Incidentally there were frequent conferences with officers of the government, architects, artists, etc. The more important of the questions considered were the site of the proposed Lincoln Memorial, the designs for the new buildings for the Departments of State, Justice, and Commerce and Labor; of the new building for the Bureau of Engraving, and the new Washington City Post Office. Of the $10,000 appropriated for the payment and use of the Commission during the year, about five hundred dollars was left untouched. The Commission seems to have been neither extravagant nor useless.

HISTORIC PRESERVATION SOCIETY.

The sixteenth annual report of the American Scenic and Historic Preservation Society is a volume of something more than six hundred pages, exclusive of 65 full-page plates and several maps. Thus is it in a class by itself as regards the Society's preceding reports. In the usual account of the Society's activities and interests of the year, there is included an exceptional record of efforts to preserve historic buildings. Among the structures which it tried to save to the public were the Billopp House on Staten Island, a stone building believed to have been erected in 1668; the Verplanck Mansion near Fishkill Landing; the brick dwelling in Kinderhook, which was the residence of Martin Van Buren; the very old building known as Fort Crailo in the city of Rensselaer; the Schuyler Mansion in Albany; the Glen-Sanders House in Scotia, across the river from Schenectady, erected in 1713, but mainly from the material—doors, woodwork, and massive timbers with wooden pins—that was in its predecessor, built in 1658; and the Herkimer House in Danube. Only in the case of the Schuyler Mansion was entire success achieved; but as several of the bills were vetoed by the governor after passing both houses of the legislature, and as in several cases the agitation may be said to have only begun, it is by no means certain that at least most of these structures may not eventually become public property, carefully preserved in about their original condition. Another section of the report to which architects will turn records the considerable action taken, and more attempted, to secure a regulation of public signs. Included among the appendices are reports by Dr. George F. Kunz, the President of the Society, on American City Parks—with rather remarkable compilations of statistics; on Foreign Regulations for the Conservation of Scenic and Historic Places and Objects; and on the dedication of the building constructed in Washington for the Bureau of American Republics.

NEW KIND OF CIVIC CENTER.

The term "civic center" has lately come in Philadelphia to have a different — that is to say, a more compact—meaning than in most other cities. During recent years, the tendency of the term has been expansive. It has included groups of buildings of various

kinds, sometimes semi-public as well as public; it has embraced the broad plaza, or even park, that bound them to one another; it has been elongated, as in Baltimore, into a succession of squares on which public buildings stand; it has been extended around corners and tangentially, as in the discussion of the possible developments around the new Court House site in New York. But Philadelphia has contracted the term to mean a single structure. The discussion arose through the need of the City Club for a commodious home of its own. One way to secure this was by the erection of a club-house; another way, which has been very earnestly considered, was by the erection of a large structure that should house various enterprises of kindred purpose and should be in such very truth a civic center that the use of the phrase was inevitable. Such a building, pleaded the Public Ledger, would do for civic organizations what the home of the United Charities in New York does for the several organizations sheltered by it; or what is done by the building in which the greater engineering societies have their New York offices. It says: "The physical grouping of the social, civic and philanthropic forces of the city's life, such as is contemplated by this plan, would have far-reaching consequences." It surely would; and how interesting would be the problem of expressing architecturally the dignity of purpose, the fellowship of labor and of interest, the significance to the State and to society, of this true civic center! Contacted, shorn of gurgling fountains, of formal trees, of seats for idle but weary citizens, of harmony of cornice line and set back, it yet loses nothing of its architectural interest. If the problem should be given and adequately solved, the designer of this compact civic center will not want for recognition.

AN ENGLISHMAN'S ADVICE

"What America wants is the inoculation of Garden City ideas." This is a statement made by Thomas Adams, town planning expert of the local Government Board of England, in an article which he contributes to the magazine, "Garden Cities and Town Planning" and in which he gives a summary of impressions gained by him in a recent visit to this country He argues his point in this interesting fashion: "Whether Americans are likely to adopt the Garden City method may be opened to doubt, but I am satisfied that the country is ripe for a propaganda similar to that which has been conducted in England for the last ten years. The upward tendency of rates, rents and price of land in the great cities, the congestion of traffic, the increasing difficulties of transportation, the growing desire to improve the conditions of life in the cities, for the working classes, the recognition of the fact that the efficiency of the laborer depends largely on healthy home environment, make it a field in which Garden City ideas can be sown with the prospect of a fruitful harvest. Moreover, there are the usual prejudices to remove—the erroneous ideas that concentration for business purposes is necessary for efficiency even when carried to the extent of congestion, that workpeople do not want to live away from the lurid glare and unhealthy attractions of the city streets and saloons, that it is more expensive to manufacture in the country than in the town. Isolated and unorganized movements of manufactories have tended to strengthen these prejudices. There is wanted the organized effort which has its expression in this country at Letchworth. Many of the mistakes at Letchworth can be avoided. The special conditions of the United States can be fully regarded and the enterprise and advertising genius of Americans can be used to make such an effort bolder and more rapidly successful than in this country.

"It is needed not so much for the sake of the experiment itself that would merely be a drop in the ocean. It is needed to make Americans realize that town planning must begin at home, must provide amenities for the house as well as amenities for the city as a whole, must prevent the recurrence of evils as well as attempt to mitigate them when they are created, must 'spread the people' rather than concentrate them."

ENGLISH TOWN PLANNING CONFERENCES.

The National Housing and Town Planning Council of England has sent out announcements regarding the so-called Northern Conference, which is to be held in Manchester, England, March 27th and 28th. It was originally intended to have only one Conference, which should be national in scope; but, significantly, the interest in the subject has become so widespread in England —owing largely to the operation of the Town Planning Act—that now three Conferences are proposed. That in Manchester will come first. A month later the Southern Conference will be held, in London on April

24th and 25th. In June, it is expected, a Conference for Scotland will be held—probably in Glasgow. At these Conferences the need for town planning will be taken for granted and the whole time will be given up to the consideration of practical measures for securing its benefits. Of these, it is promised that a subject which will receive special attention is the planning of roads (or streets) in town planning schemes —both main arterial and secondary streets. The limitation of the number of houses per acre—various standards in such limitation and the probable effect upon rents—is another matter which the committee says will be earnestly discussed. It is expected that at the close of the Conference an Advisory Town Planning Commmittee for the Northern district will be elected, to serve for the ensuing year. At the Conference held in Liverpool, a year ago, 600 representatives of local authorities were appointed to attend. It is expected, the announcement declares, that the number of delegates at each of this year's three sectional conferences will be far in excess of that number.

BURNHAM GOES TO BROOKLYN.

New York has had an unusually prominent place in the city planning news of the last two months. The selection and definite adoption of a site for the new court house in Manhattan was preceded by only a few days by the visit of Daniel H. Burnham to Brooklyn. Where Mr. Burnham goes to talk city planning, one may be sure of big ideas and great ambitions. His visit to Brooklyn was in response to the invitation of a committee containing many influential men, and at the Hamilton Club he was the guest of about two hundred of Brooklyn's moulders of opinion. The mayor of the greater city and the president of the borough have been interested in the project of a Burnham plan for Brooklyn and a committee has been organized to carry forward the campaign in behalf of it.

New York, including the borough of Brooklyn, has had great plans made for it before this—by the New York City Improvement Commission, for example, in an official report to Mayor McClellan and the board of aldermen. This was in 1907, and nothing came of it except the handsomely illustrated report. But several circumstances give reason for hope of more tangible results, should Mr. Burnham now make a study. One advantage is that Brooklyn is a more homogeneous community than is the greater city. It has that self-consciousness which is so valuable a possession in civic enterprises. Another advantage is that Mr. Burnham is not a local resident. The words of an outside expert always carry weight. And finally there is a great advantage in the enthusiastic support of a public-spirited local committee. To this committee Mr. Burnham gave the following excellent advice, as a parting word at the time of his visit: "Get the right start," said he. "Begin by making your people enthusiastic. Go after them and keep on going after them by speeches, by pamphlets, by charts and lectures. You must have the people behind you before you can do anything for a city. Show them that it pays in dollars and cents that their city should be beautiful. Do this and the rest will be easy."



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THE ARCHITECTURAL RECORD

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THE ARCHITECTVRAL RECORD

APRIL, 1912

VOLUME XXXI NUMBER IV



Some Chicago Buildings

Represented by the work of Holabird & Roche



By

FRANZ WINKLER

UNDOUBTEDLY there is such a thing as Chicago architecture, separable from architecture in Chicago. Even apart from the modern and unacademic performances of a few pioneers, the ordinary building of the ordinary architect in Chicago differs from the like building elsewhere, at least to the Eastward. The business architecture of Chicago is a little older, though not much, than the "Chicago construction." It did not begin immediately after the fire. Typical buildings, such as the Rookery, were at least a decade later. While walls were still walls and had to be built and not merely veneered, the business buildings of Chicago were already distinguished by the grim utilitarianism of their aspect. The introduction of the skeleton construction greatly promoted this appearance. The uprights were thinned absolutely to the structural minimum of the iron post, and in expression, as Lowell said about the early buildings of Harvard, the business buildings of Chicago "looked like business and nothing more." That is where they differed and differed to their advantage, from the mercantile architecture in the East, and they have continued so to differ. The Eastern man erecting an edifice for the use of his business feels in a manner bound to make it a proclamation of his commercial success. He wilfully spends more money on it in the way of decoration, which so often does not decorate,

than would be needed to accomplish its practical purpose. All this, for thirty years at the least, the projector of the business building in Chicago has regarded as mere nonsense. In the judgment of the Chicagoan, the Easterner needs to "scrap" a good deal of his academic learning. Speaking of office buildings, the Westerner believes that the first function of every commercial building is to pay. The real basis of the venture is financial. From this point of view he entirely disapproves of much of our "swell" "bow-wow" building. He refers to many of our buildings, for instance on Broad Street and lower Broadway in New York, which carry on their fronts thousands of dollars worth of enrichments, with an incredulous smile. These particular buildings, though academically well done, would be, he knows, not only an impossibility in Chicago, but unthinkable there. Were a bank president in that city to perpetrate a financial joke of this character, his friends would proceed post haste to ask for a writ "de lunatico inquirendo."

Undoubtedly this is a good thing for architecture. A commercial building should simply answer its purpose. Anything beyond that is irrelevant, incompetent and impertinent. But when the humblest of practical uses issues in the loftiest of buildings, towering over those to which architectural adornment is proper, the strain, both upon owner and architect, is great. Nevertheless, the architect who sticks to his text gets his reward. He gets it, if not in the aspect of his building, in the aspect of the city of which his building is a part. The heart of Chicago "looks like business" to an extent to which no city to the Eastward of it even approaches. Chicago architects indeed say that the course of grimness and bare utility in architecture is taking its way Westward, and that if you want to see a business building reduced to its simplest expression, you must go West, even from Chicago, to Portland or Seattle.

The Chicago architect of the present, by his own admission, is endeavoring to induce his client to spend more money than the bare needs require for the purpose of making his building an ornament to the city. It is really to be hoped, in the interest of architecture, that he may not succeed. For not only has the business part of Chicago the expression which belongs to the struggle for life, not only does it look like exactly what it is, but also it is a basis and background for the buildings to which a higher degree of elaboration and ornamentation is proper. It is in those bare and barn-like structures that the practice of the most successful architects of Chicago has mainly lain, and in selecting for illustration of their work one of the most successful architectural firms of Chicago, it is in the bare and untrained business building that the bulk of this tremendous volume of their work, approximating a value, as one hears, of a hundred million of dollars, necessarily consists.

William Holabird, born in Dutchess County, N. Y., September 11, 1854, graduated from St. Paul High School, St. Paul, Minnesota, in 1871; entered West Point in 1873, remaining till 1875, when, in September of that year, he resigned and came to Chicago to study his chosen profession—architecture. In the same year he entered the office of W. L. B. Jenney, and remained there for a number of years, when he formed a partnership with O. C. Simonds, a well-known landscape gardener, and under the firm title of Holabird & Simonds began an independent practice.

Martin Roche, born in Cleveland,



Congress Hotel. McCormick Building. University Building Monroe Building

SKYLINE OF CHICAGO AS SEEN FROM LAKE MICHIGAN.



THE SOUTH HALF OF THE MONADNOCK BLOCK, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



THE MARQUETTE BUILDING, CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.

Ohio, August 15, 1855. His family removed to Chicago in July, 1857, where he pursued the earlier studies of his life. He showed a decided inclination for the artistic, and as far as was within his power, applied himself to cultivating the same. In May, 1872, he entered the office of W. L. B. Jenney, where he remained until 1881, when he made a partnership with Messrs. Holabird & Simonds, adding his name to the firm. So as is seen, Mr. Holabird and Mr. Roche gained their early training in the same office.

Mr. O. C. Simonds withdrew from the combination in 1883 to practice in his profession of landscape-gardening, and the firm's name became Holabird & Roche.

In January, 1896, Mr. E. A. Renwick, who had been closely allied with the firm since 1882, was made a partner, and so to-day the firm is composed of Mr. Holabird, Mr. Roche and Mr. Renwick.

This is the present firm of Holabird & Roche, whose offices are located, with an appropriateness which is believed to be wholly uncalculated, in Root's old monumental Monadnock Building. This firm of Holabird & Roche is one of the oldest and most honorable in Chicago. It has the enviable distinction for the Easterner of having perpetrated more buildings devoid of intentional "architecture," than has anyone else.

Consider the Chas. Netcher Building, one of the big stores of Chicago. Here is the architectural embodiment of the "Chicago Idea" in commercial architecture. Would anybody venture upon such extreme plainness in a like erection in New York or Boston? Evidently the essentials are all supplied and evidently only the essentials.

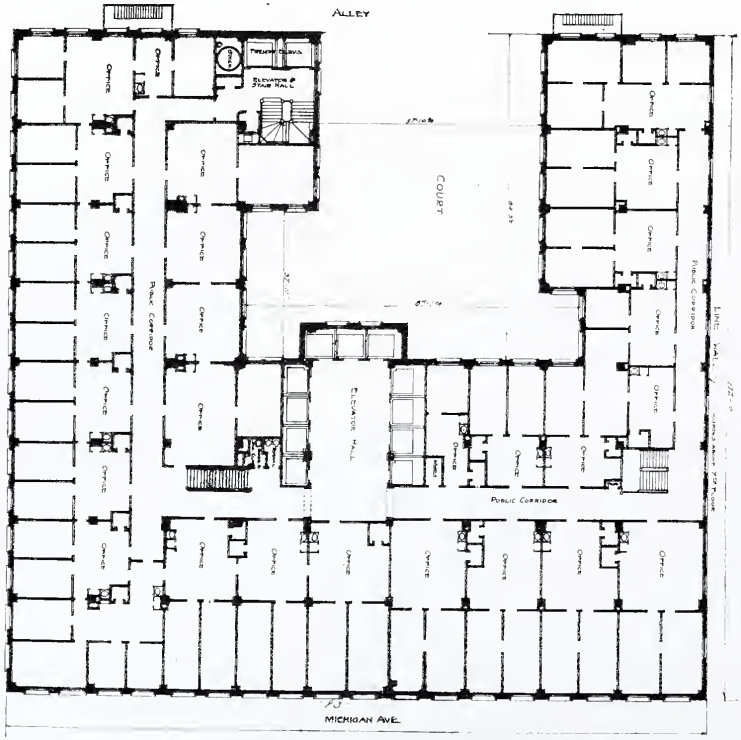
"The prayer of Ajax was for light" and Ajax must have been the owner of a big store. This Netcher Building is flooded with light. The uprights and the floor lines are diminished to the utmost. The front is a mere sash frame with huge square panes, of which the shape, accruing from the uprights and the cross pieces, would horrify an architect who practiced his art academically. In fact it did revolt one architect of a commercial building in New York to that extent that he covered his front with a trellis of two story "orders" in order to dissemble the shape of the openings. And another project for a skyscraper is now under consideration in New York in which the architectural unit is an order of three stories. That would not suit Chicago at all. The openings here are undisguised and undissembled. There is not an unnecessary feature except the useless thickening of the floor line above the second story, which, by the way, does the building no good, unless we accept the block over the center of the principal front, which appears to be superimposed merely for ornament, and which does not effect its purpose. This simplicity, it appears, is revolting even to the designers who found themselves forced to do it, for in other similar buildings in which they felt that they had more leeway, they took it without hesitation. There is the Mandel Building, for instance, in which the facts of the case are modified by converting the front into a columnar composition of two story base, ten story shaft and three story capital. But does it really look any better for the variations? Unless those three upper stories have some different use and function from those of the square openings below them, the "architecture" is a "suggestio falsi" which detracts from the appearance of grim reality that belongs to the simpler building. Perhaps the tall arcade of the



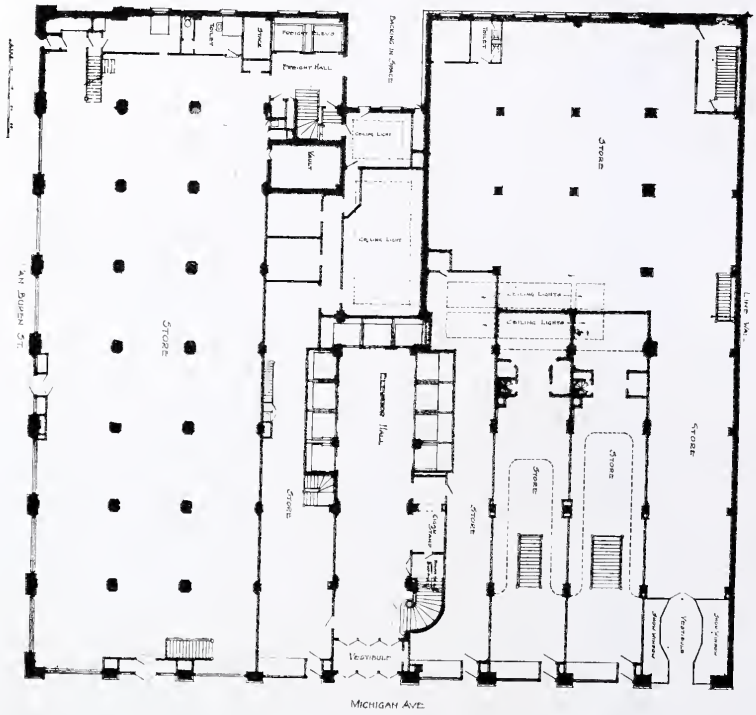
THE REPUBLIC BUILDING, S. E. CORNER OF STATE AND ADAMS STS. HOLABIRD & ROCHE, ARCHITECTS.



THE McCORMICK BUILDING, VAN BUREN ST. AND MICHIGAN AVE., CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.



Typical Office Floor.



First Floor Plan.

THE McCORMICK BUILDING, VAN BUREN ST., & MICHIGAN AVE., CHICAGO. HOLABIRD & ROCHE, ARCHITECTS.

lower stage of the Rothschild Building has more logical justification, since the first story of a big "department store" may and sometimes must be much loftier than the stories superimposed upon it. On the other hand nobody could reasonably quarrel with the division into bays of the Stoddard-Dayton Garage, nor with the arcuation of the upper story, which conceivably again has some difference in purpose from the stories below. The piers are thinned to the utmost and the openings expanded to the utmost. It is still a strictly business building and shows nothing incompatible with its uses. This is equally true of the Woodmen of the World Building in Omaha. It is illogical, it is true, to crown with capitals, so as to convert them to the proportion of classical columns, the uprights of the two lower stories, since these uprights evidently are not stopped by the capitals, but are continuous throughout the whole height of the building. On the other hand, the reinforcement of the corners of the pavilions as compared with the "curtains" corresponds to a mechanical fact, since the corner post has evidently more to carry than has one in the course of the wall. The difference is much exaggerated, of course, for architectural effect, but it by no means interferes with the primary purpose and the real expression of the building.

The very attenuated Gothic of the North American Building cannot be called successful, not only because the grove of pinnacles in which the uprights sprout at the top are too much developed for the character of the occupancy of the building, but also, and what is a more serious defect, because the attenuation of the posts at the bottom, compared with their comparatively full-clad appearance above, make the building more massive above than below and contradicts a primary mechanical requirement. Top-heaviness is always an objectionable element in architecture.

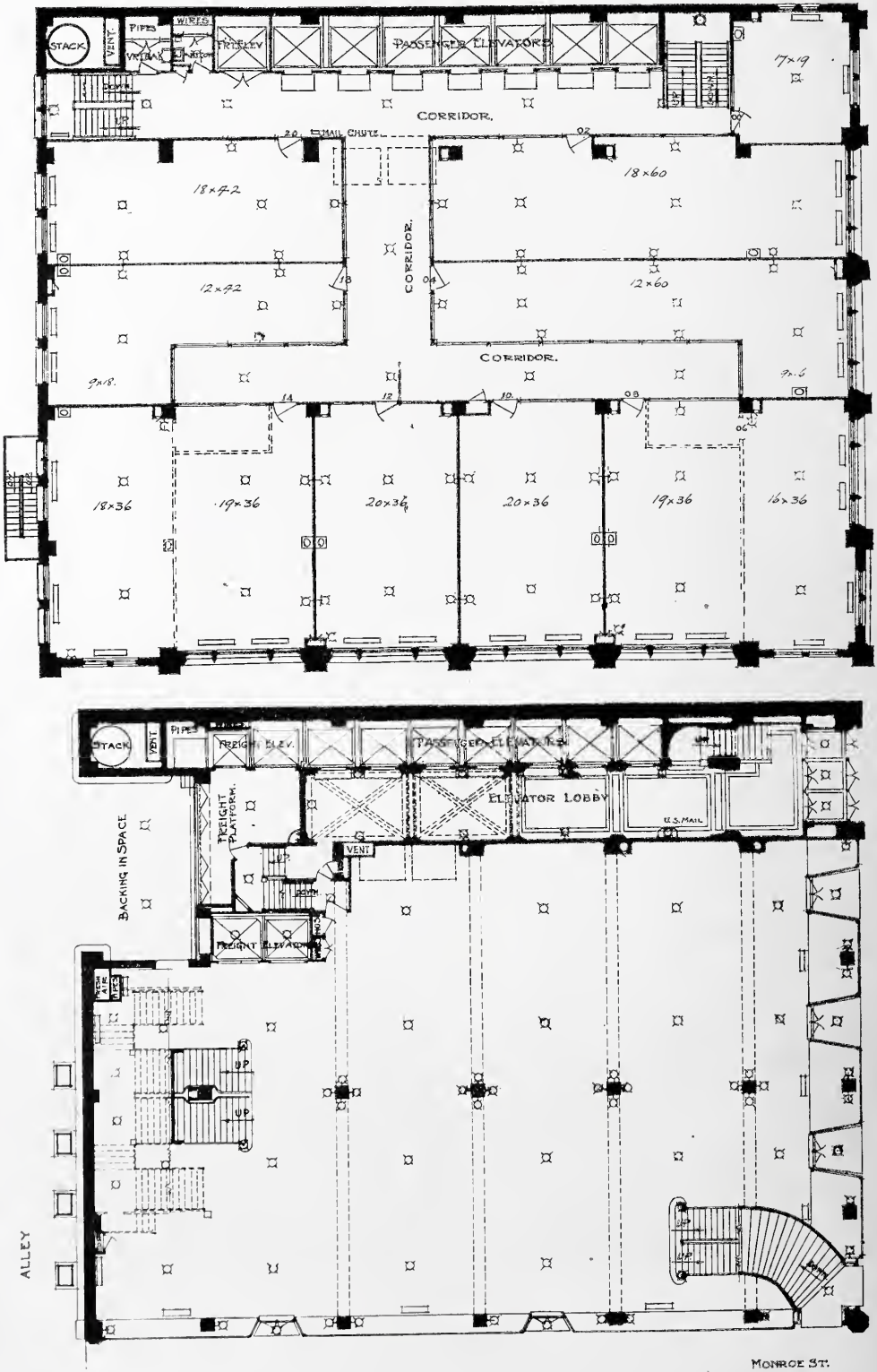
Much more successful as objects of architecture than any of these are the two fronts on Michigan Avenue, of which one, the University Club, transcends the trammels of a business building, being in fact a club house, which not only admits but demands a more elaborate and domestic treatment than belongs to a strictly business building. The other, however, the Monroe Building, is strictly a business building and a very admirable example of its kind, having no more ornament than fairly expresses the structure. Whether, simply as the administrator of an investment, the architect is justified in a gable roof instead of continuing his walls to the usual uncouth parallelopiped may be questionable, but at any rate the sensitive spectator will thank him for having found the variation permissible.

While we have to praise those bare business buildings for being what they look like, or looking like what they are, we must admit that an architect with a soul above buttons must find it very tiresome to be condemned to do an interminable series of them, or at least to be condemned to do nothing else.

Our present subjects have had their escapes from the monotony of this sky-scraping "line." They have had them even in the heart of Chicago, which is, of course, primarily the region of business buildings. Nevertheless, there are other buildings, even in the heart of Chicago. For example, there are hotels, in which the limitations imposed upon an architect are by no means so stringent as those of the business buildings. The Hotel Sherman and the Hotel La Salle are the contributions of our architects



THE NORTH AMERICAN BUILDING, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



Floor Plans.
NORTH AMERICAN BUILDING.
HOLABIRD & ROCHE, ARCHITECTS.



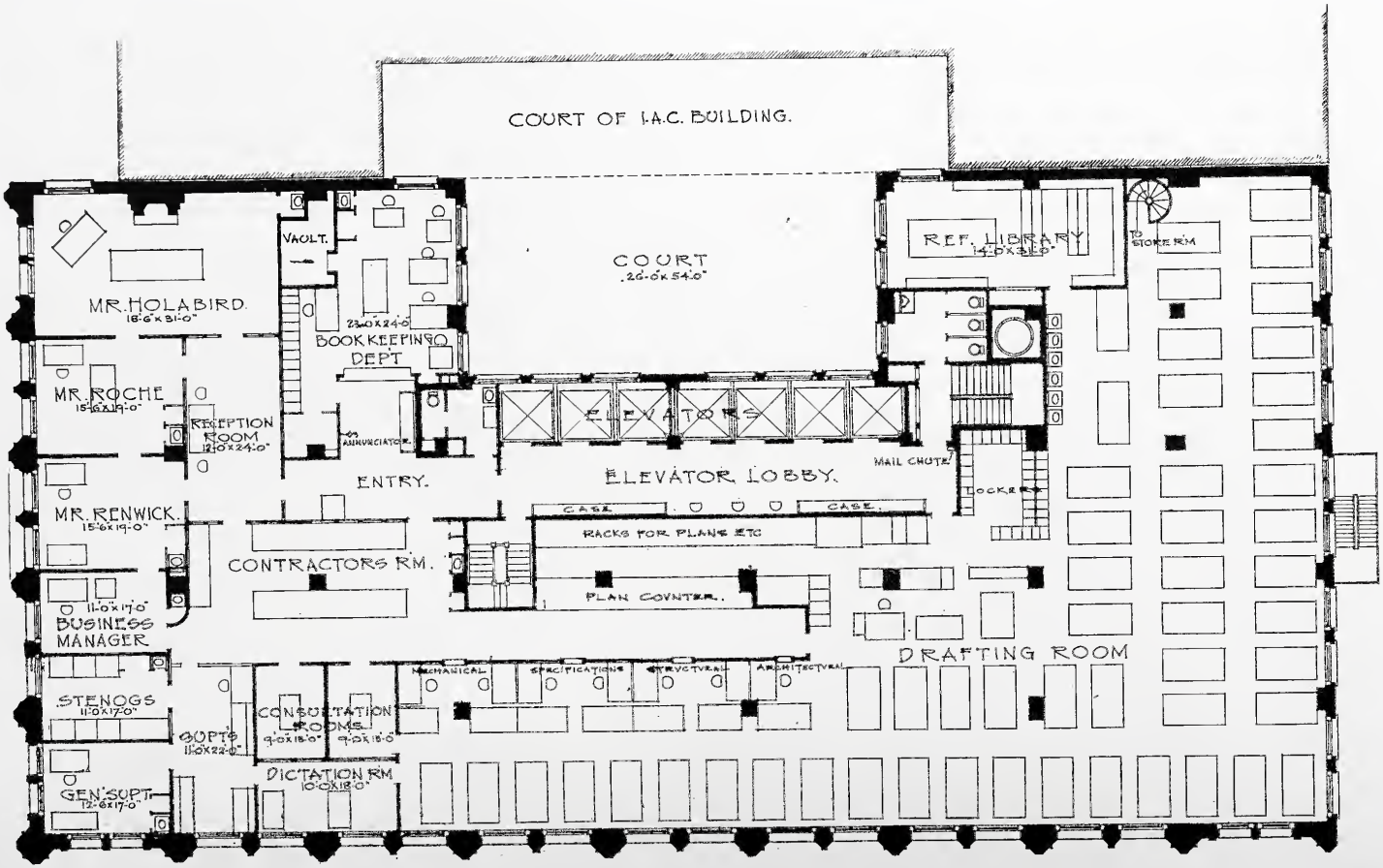
THE CITY NATIONAL BANK BUILDING. OMAHA, NEBRASKA. HOLABIRD & ROCHE, ARCHITECTS.



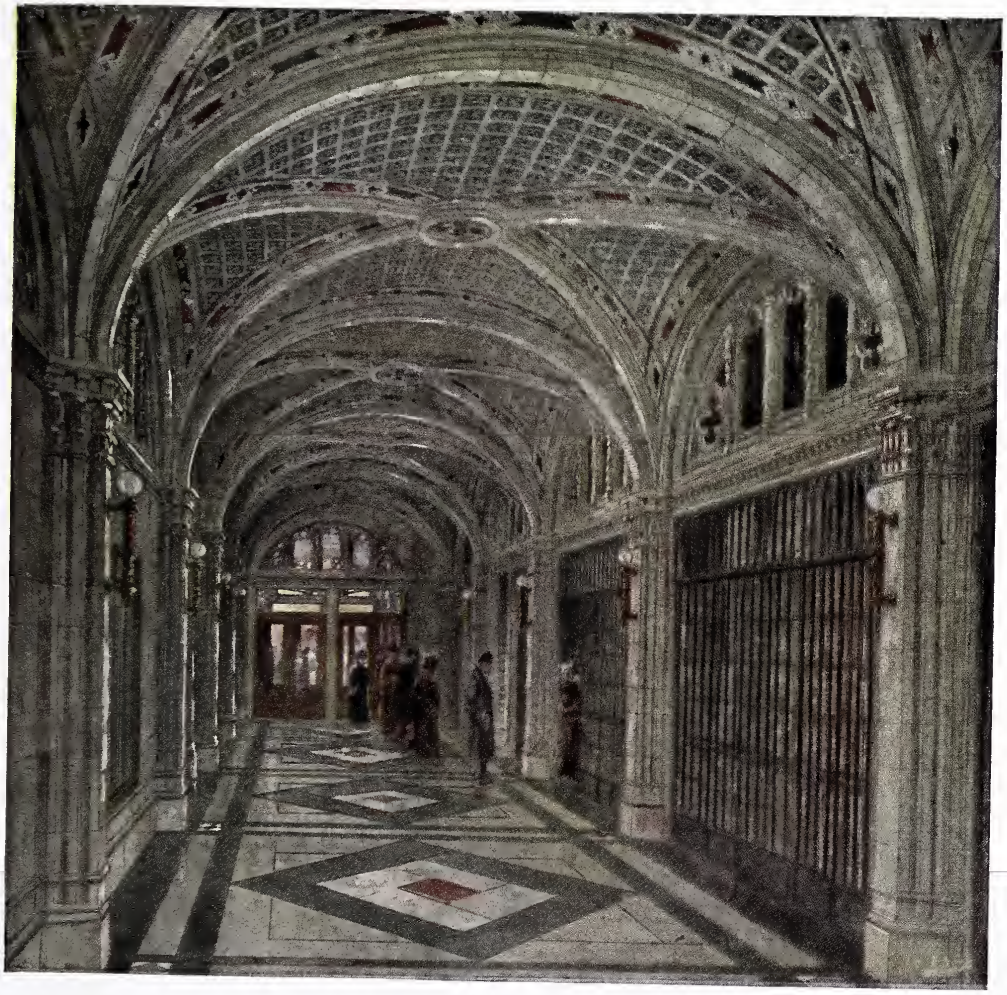
THE UNIVERSITY CLUB, MONROE ST. AND MICHIGAN AVENUE.
CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



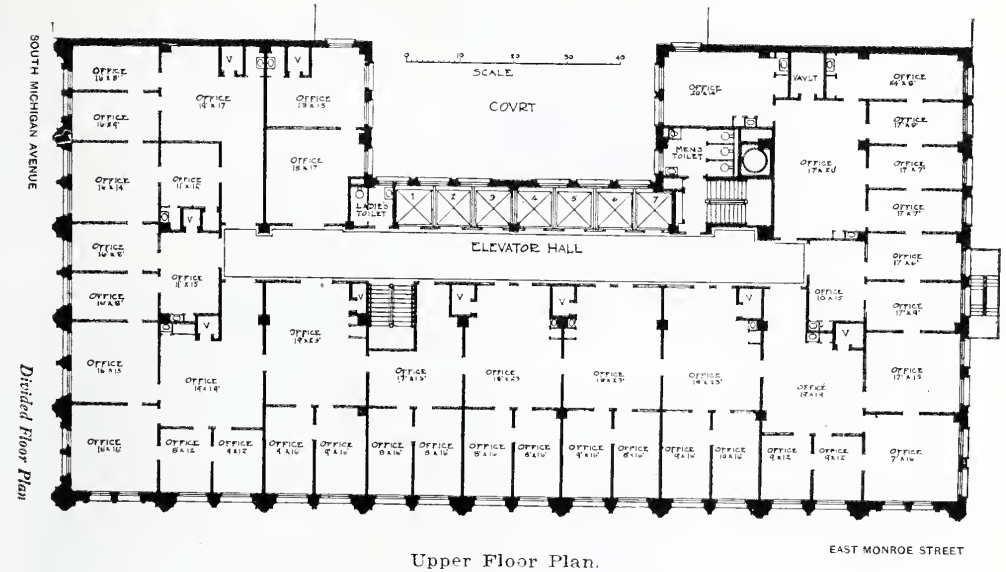
THE MONROE BUILDING, UNIVERSITY CLUB BUILDING, MONROE STREET AND MICHIGAN BOULEVARD, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



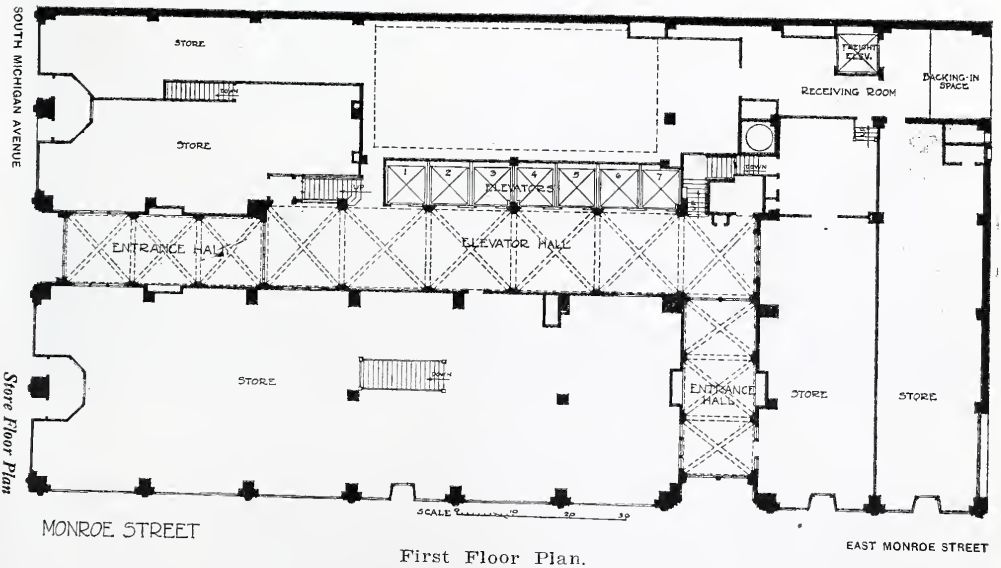
LAYOUT OF HOLABIRD & ROCHE OFFICES, MONROE BUILDING, MONROE ST. & MICHIGAN AVE., CHICAGO.



FIRST FLOOR CORRIDOR, MONROE BUILDING, MONROE ST. & MICHIGAN AV., CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



Upper Floor Plan.



First Floor Plan.

THE MONROE BUILDING, CHICAGO, ILL.
Holabird & Roche, Architects.



THE CHAS. NETCHER BUILDING (The Boston Store).
CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.

to this competition. Exteriorly they resemble each other very much. What is possibly more to the point, they equally resemble the Hotel Astor in New York, which was built and established before either of them was designed, so that in this case at least the Easterner may save his local pride by pointing out that it was the "New York Idea" which imposed itself upon Chicago and not the "Chicago Idea" which imposed itself upon New York. However that may be, the division in each of the three cases is rational and works naturally out into an effective triple composition. The great public rooms of the ground stories, naturally enclosed in stone, make a base of which there is no reason for exaggerating the natural and inherent "scale." Then come the six, eight, ten (count them yourself) tiers of bedrooms, and finally, properly enough and enclosed in a mansard, what they call in England, the "offices" of the establishment. It is a plan which in effect imposes itself for a modern hotel of the first pretention, and it does not particularly matter where it had its origin. In these Chicago hotels, it must be admitted that it is very thoroughly and intelligently carried out. More than that the great public apartments of the lower stories afford legitimate facilities for large decorative effects. A great dining room, or, if you prefer, "banquet hall," is still one of the main elements of an American hotel of the first class. We are more gregarious than the English or than Europeans generally, and we require accommodations for what Wordsworth describes as "a thousand feeding as one." He is speaking of sheep, and we of human beings, but, with architectural "accommodation" the difference is negligible. The travelling American is as gregarious as "the silly sheep." Such a place necessarily affords a large architectural opportunity. This opportunity has been availed of, one may say, pounced upon, by an architect, commonly condemned to business skyscrapers, and, in the present instance, with impressive results. A rather more limited but still impressively large opportunity is afforded in the more exclusive and select quarters of the ladies' dining room. The ladies' dining room at the Hotel Sherman, is undoubtedly a very impressive apartment, and equally impressive, whether its motive was suggested by the well known corridor of the City Investing Building in New York, or whether, as is at least equally probable, both have merely the same Italian origin.

The "bar room" is another feature of the American hotel which it behooves the architect not to disregard, and where, pursuant to our usual gregariousness, he may be compelled to provide accommodation for "five hundred drinking as one." Mr. Sullivan struck what we may call the keynote of the Chicago bar room, hung up, as it were, a "barometer" of the public taste in the Auditorium, more than twenty years ago. This at least is a "Chicago idea," upon which subsequent designers need not be ashamed to limit themselves to executing their variations, and the variations in the hotels under notice are executed with skill and with as respectable an infusion of individual invention as can be expected of anybody succeeding that "easy chief" of decorative individuality.

Such minor features as the views show of the entrance looking outward and the entrance looking inward of the La Salle, it will be agreed, are very well "up" in the competitions of like work in the most successful of American hotels.

The Blue Fountain Room and the Ger-



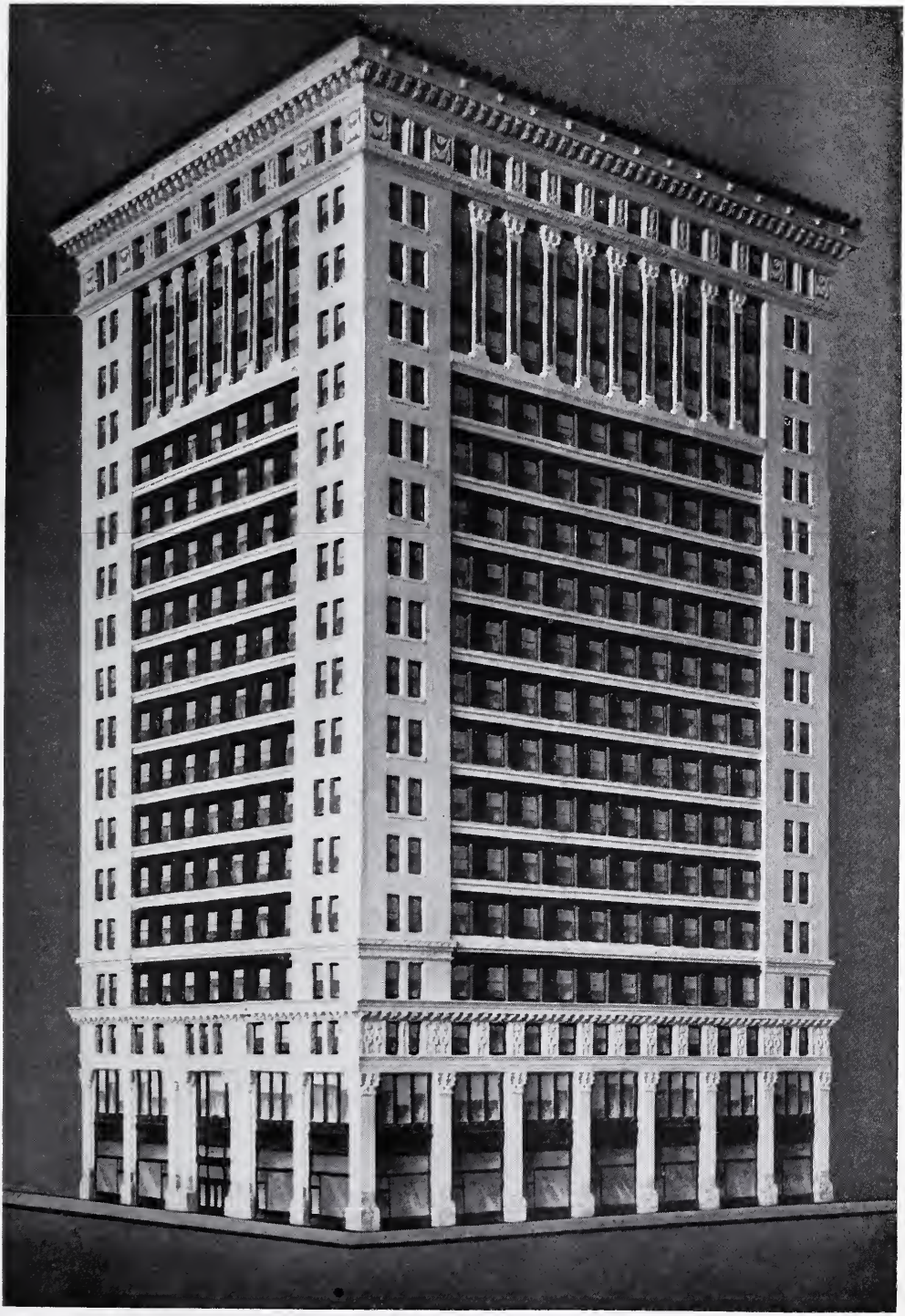
FIRST SECTION MANDEL BROS. BUILDING, N. E. COR. STATE & MADISON STS., CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.



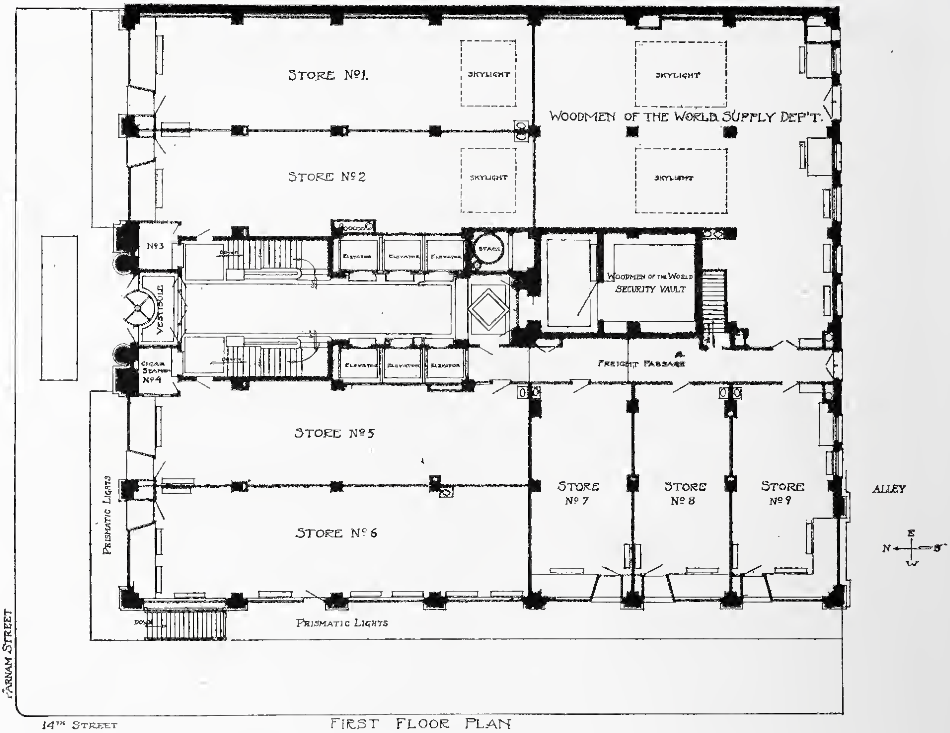
FIRST SECTION ROTHSCHILD BUILDING, STATE ST., NEAR JACKSON BOULEVARD, CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.



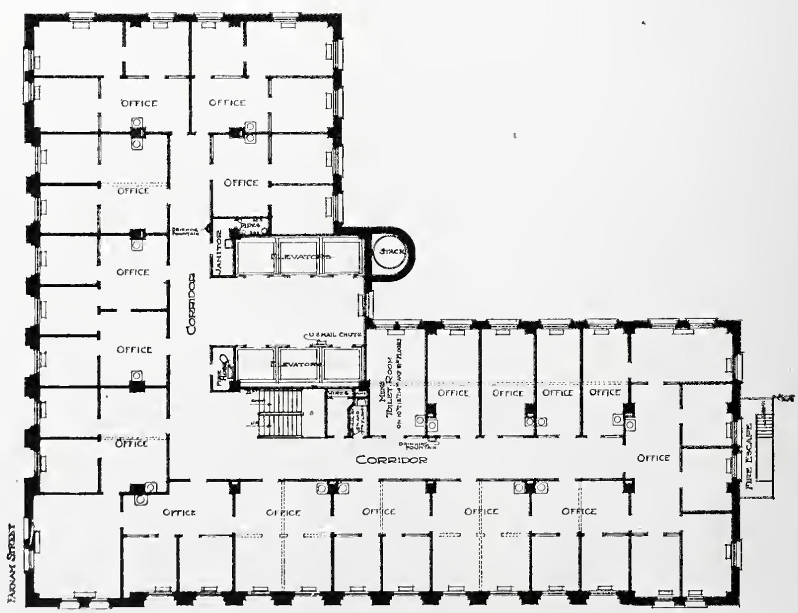
UNIVERSITY SCHOOL FOR GIRLS, LAKE SHORE DRIVE, CHICAGO. HOLABIRD & ROCHE, ARCHITECTS.



THE WOODMEN OF THE WORLD BUILDING, OMAHA, NEBRASKA. HOLABIRD & ROCHE, ARCHITECTS.



First Floor Plan.

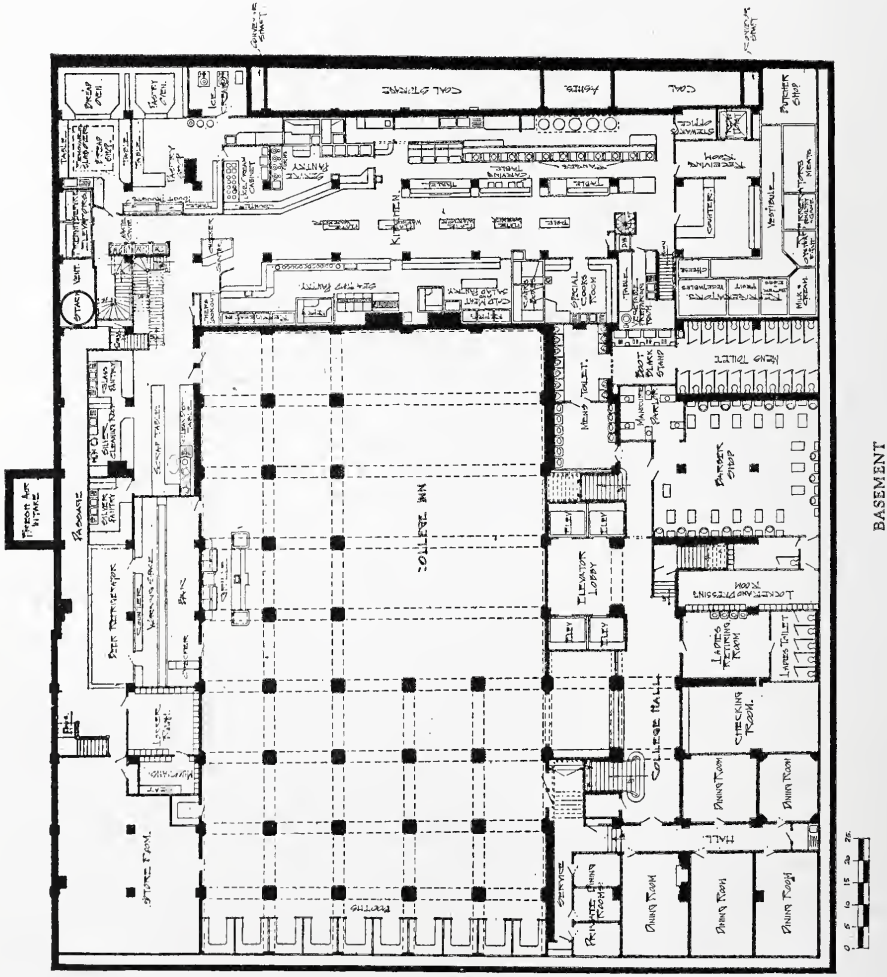


Typical Floor Plan.

THE "WOODMEN OF THE WORLD" BUILDING, OMAHA, NEBRASKA.
Holabird & Roche, Architects.



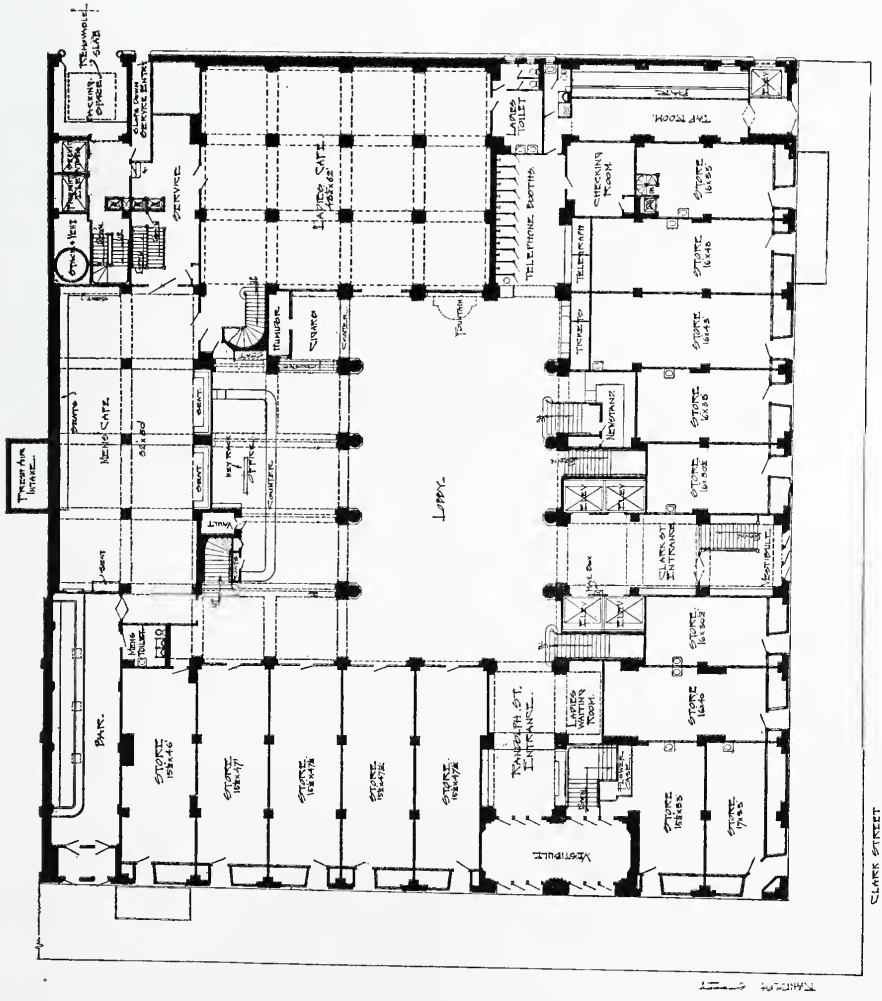
HOTEL SHERMAN, N. W. COR. CLARK AND RAND STS.,
CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.



BASEMENT

SHERMAN HOUSE, CHICAGO, ILLINOIS.

Holabird & Roche, Architects.



FIRST FLOOR

SHERMAN HOUSE, CHICAGO, ILLINOIS.

Holabird & Roche, Architects.



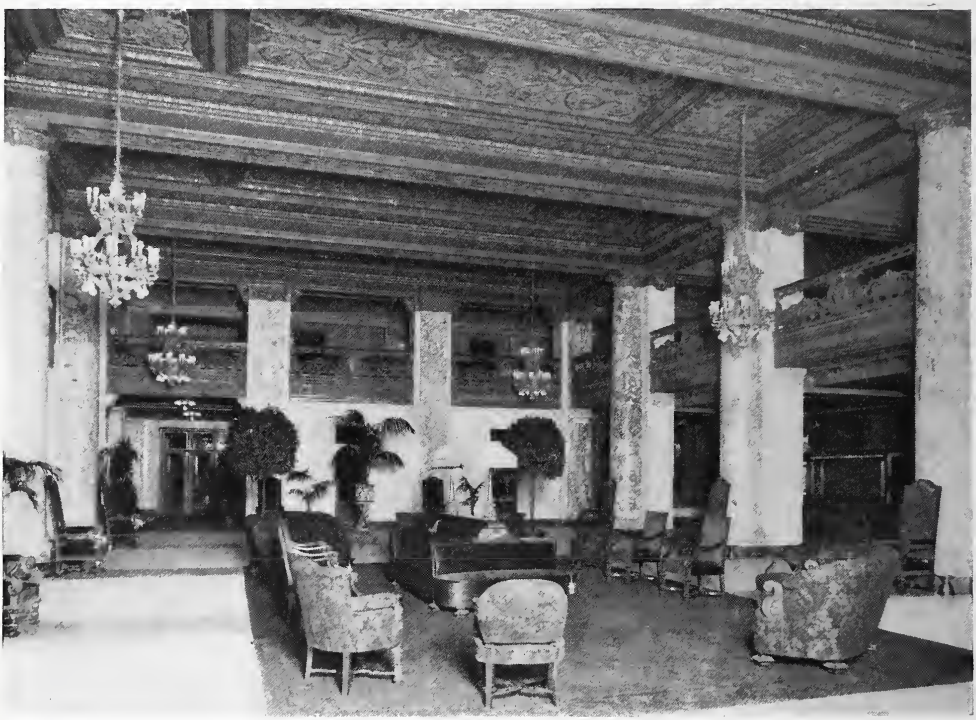
THE CELTIC BAR, HOTEL SHERMAN.

(Showing painting by Maxfield Parrish entitled "When the Pie Was Opened."

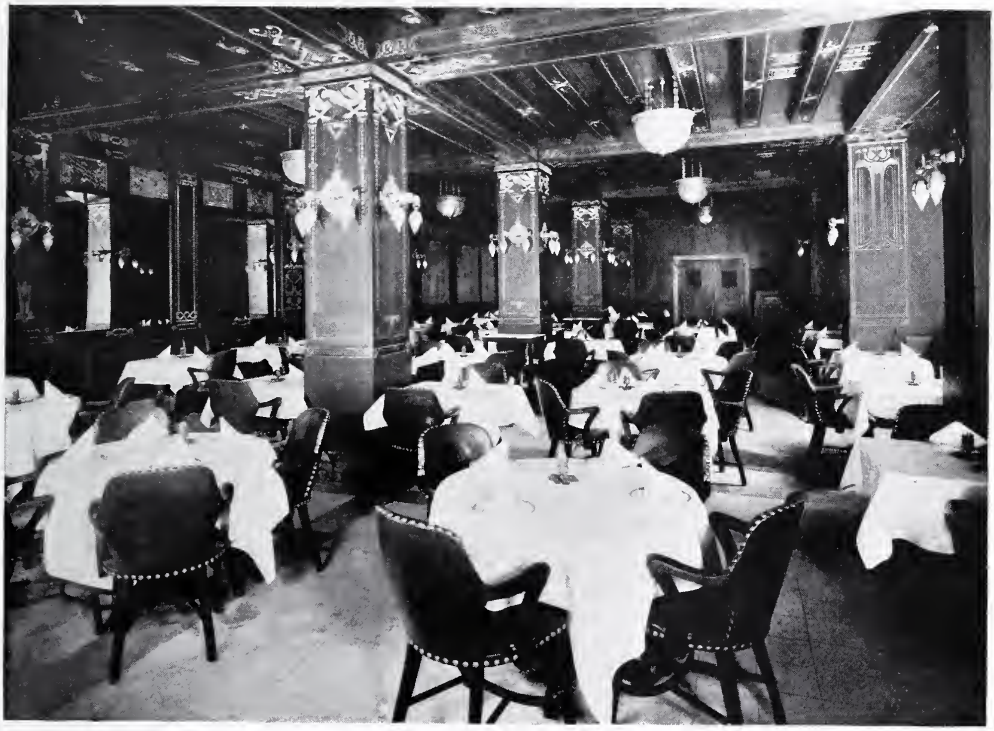
CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



LADIES' DINING-ROOM, HOTEL SHERMAN, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



LOBBY, HOTEL SHERMAN. CHICAGO, ILLINOIS.
HOLABIRD & ROCHE, ARCHITECTS.



Men's Cafe.



College Inn.
THE HOTEL SHERMAN, CHICAGO, ILLINOIS.
Holabird & Roche, Architects



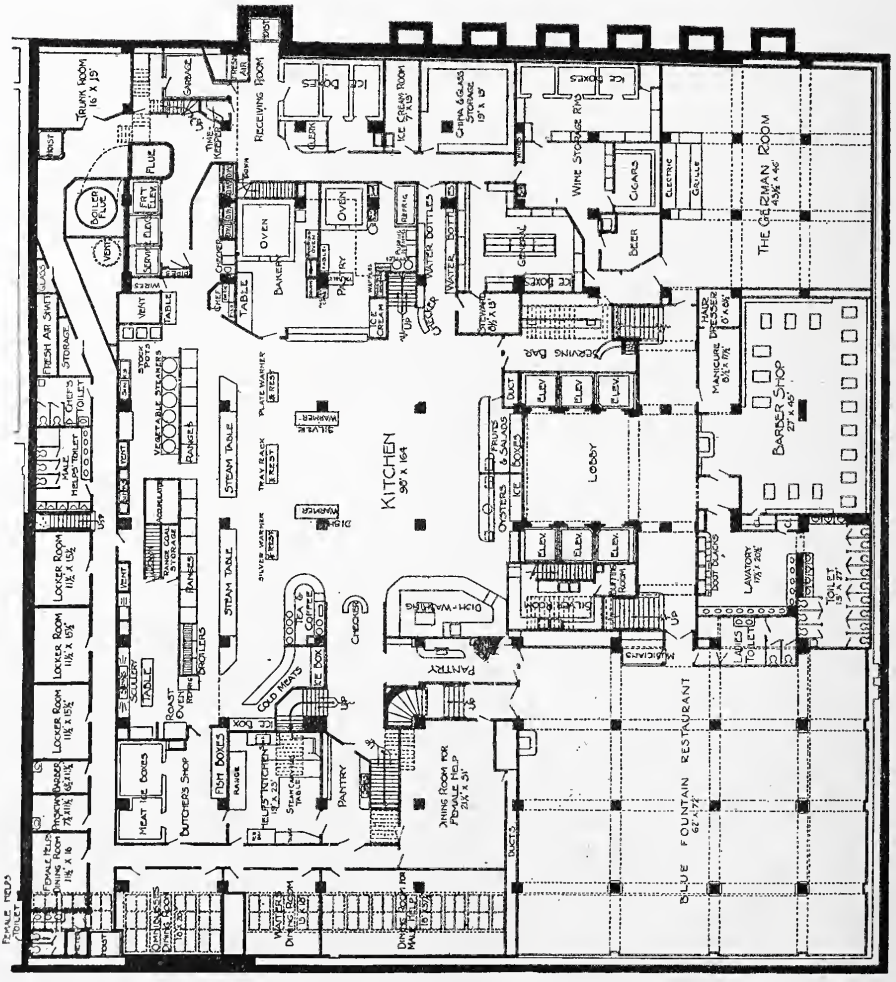
CLARK ST. BAR, HOTEL SHERMAN, CHICAGO.
HOLABIRD & ROCHE, ARCHITECTS.



ELIZABETHAN ROOM, CONGRESS HOTEL, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



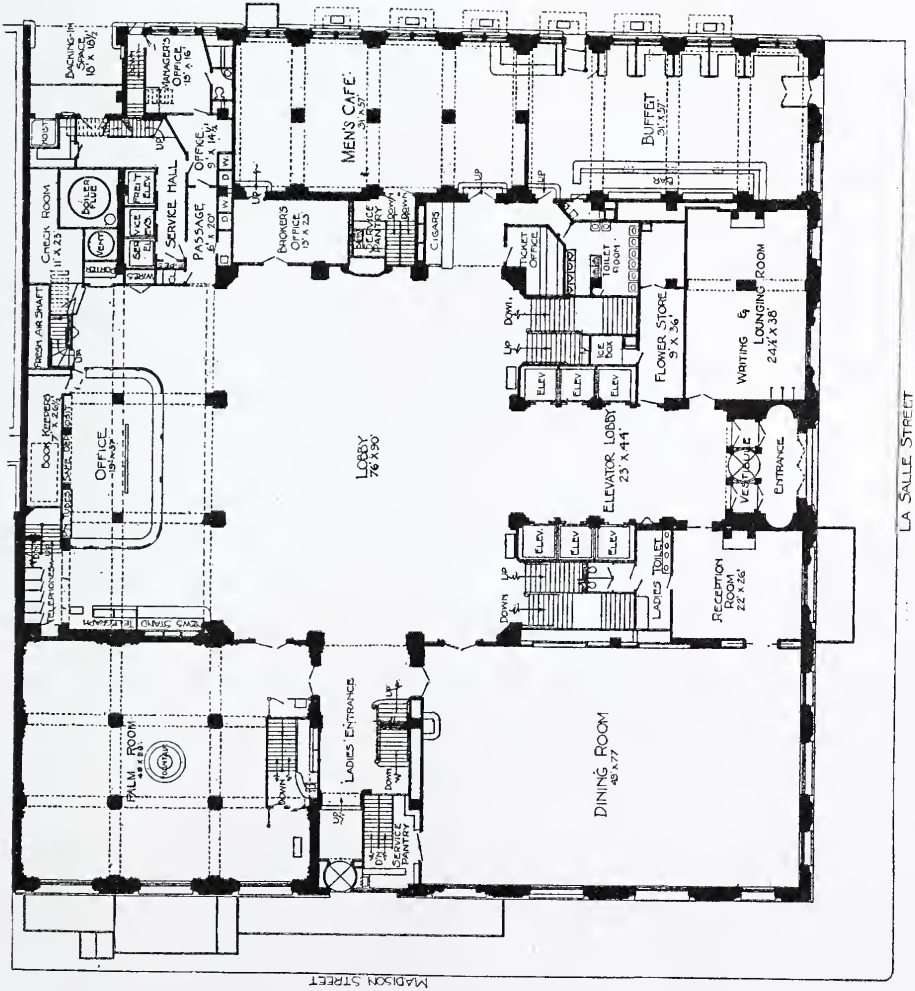
HOTEL LA SALLE, N. W. COR. MADISON AND LA SALLE STS. HOLABIRD & ROCHE, ARCHITECTS.



BASEMENT PLAN

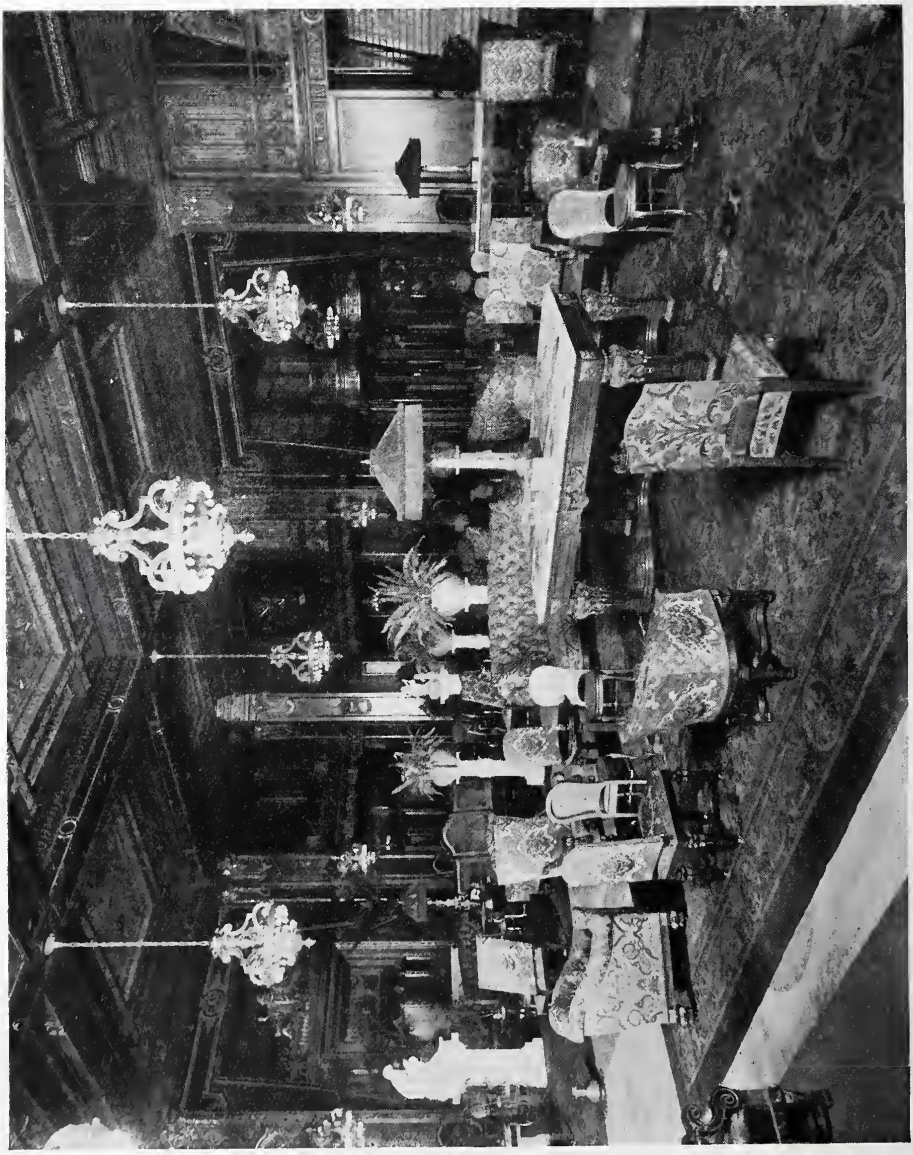
LA SALLE HOTEL, CHICAGO, ILL.

Holabird & Roche, Architects.

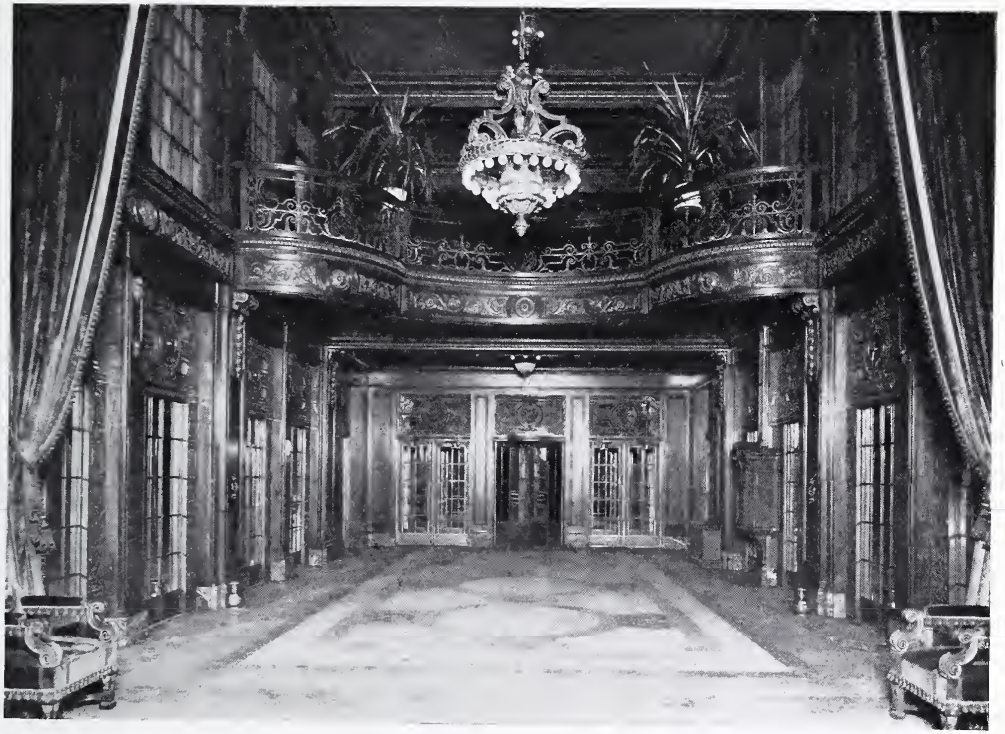


FIRST FLOOR PLAN

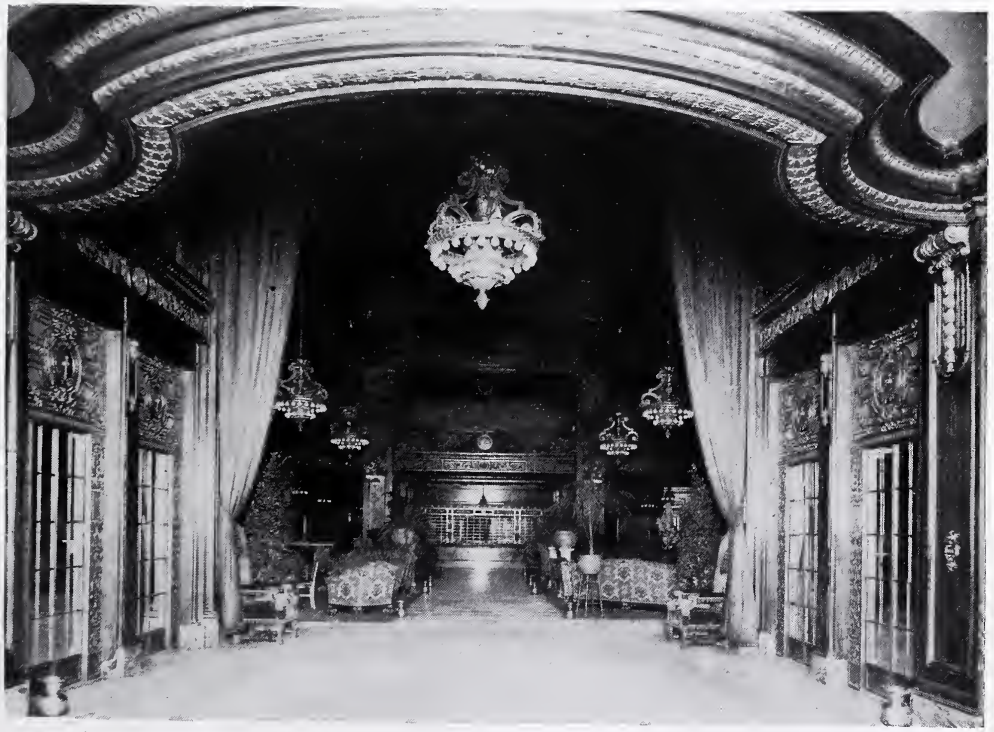
THE LA SALLE HOTEL, CHICAGO, ILL.
Holabird & Roche, Architects.



SECTION OF LOBBY—LA SALLE HOTEL.
HOLABIRD & ROCHE, ARCHITECTS.

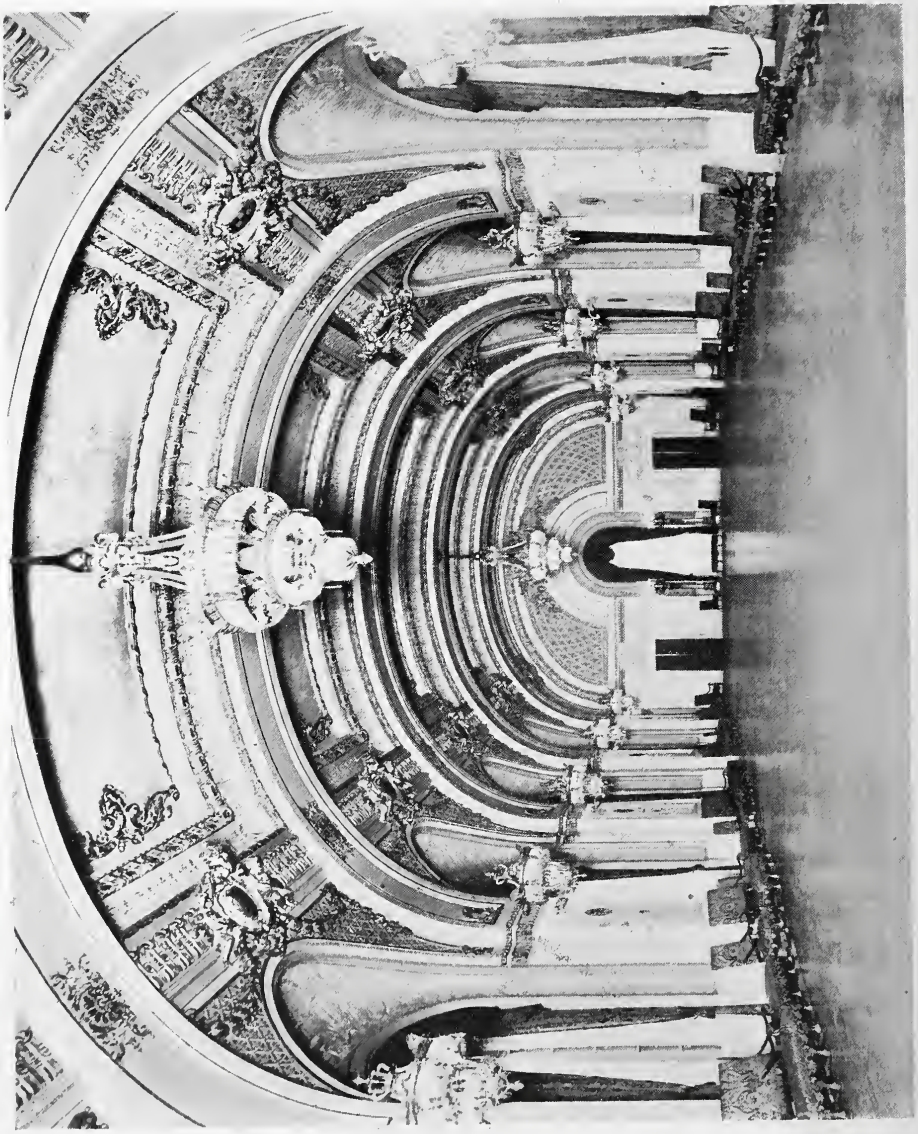


Entrance Hall.

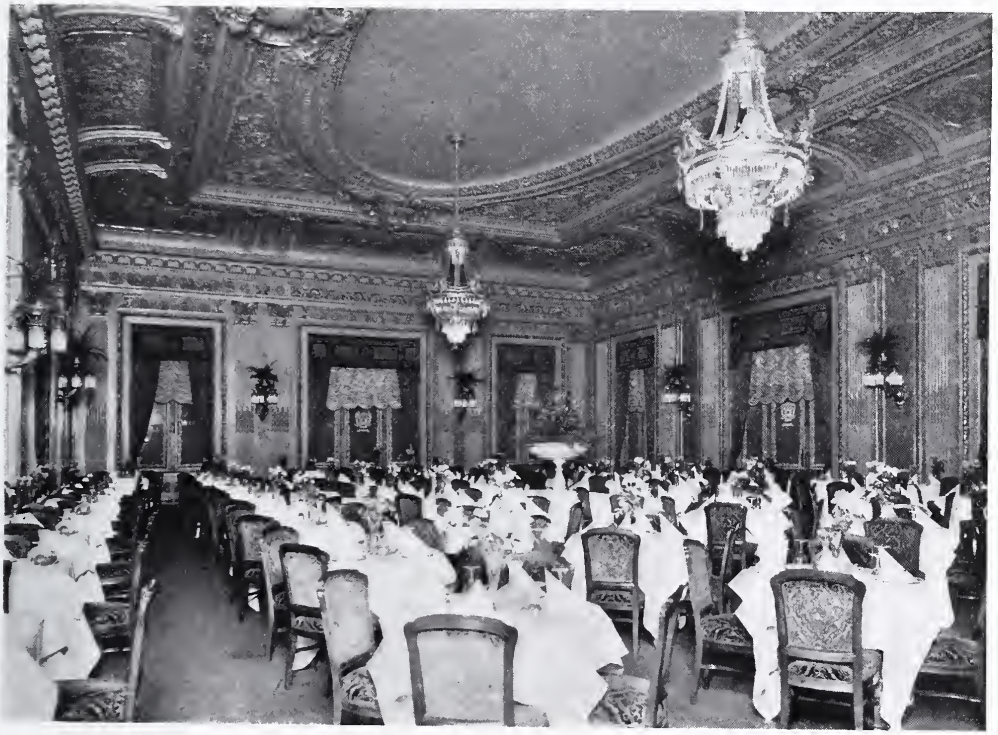


Entrance looking towards the desk.

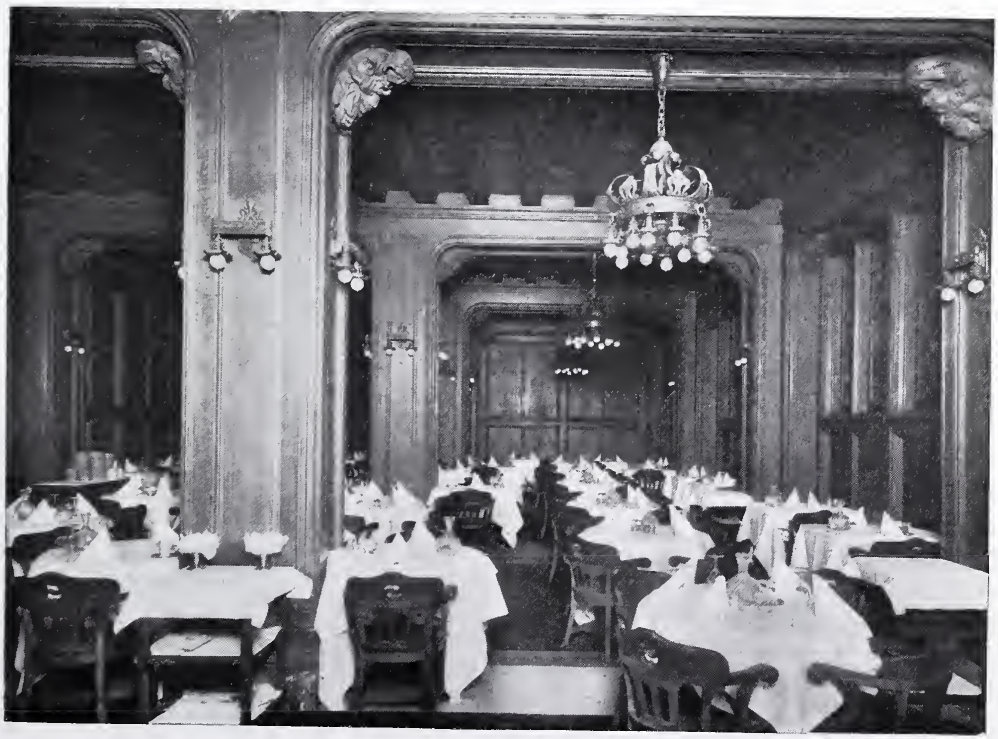
THE LA SALLE HOTEL, CHICAGO, ILL.



THE GRAND BALL ROOM—HOTEL LA SALLE, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



The Main Dining Room.



The Men's Café.

HOTEL LA SALLE, CHICAGO, ILL.

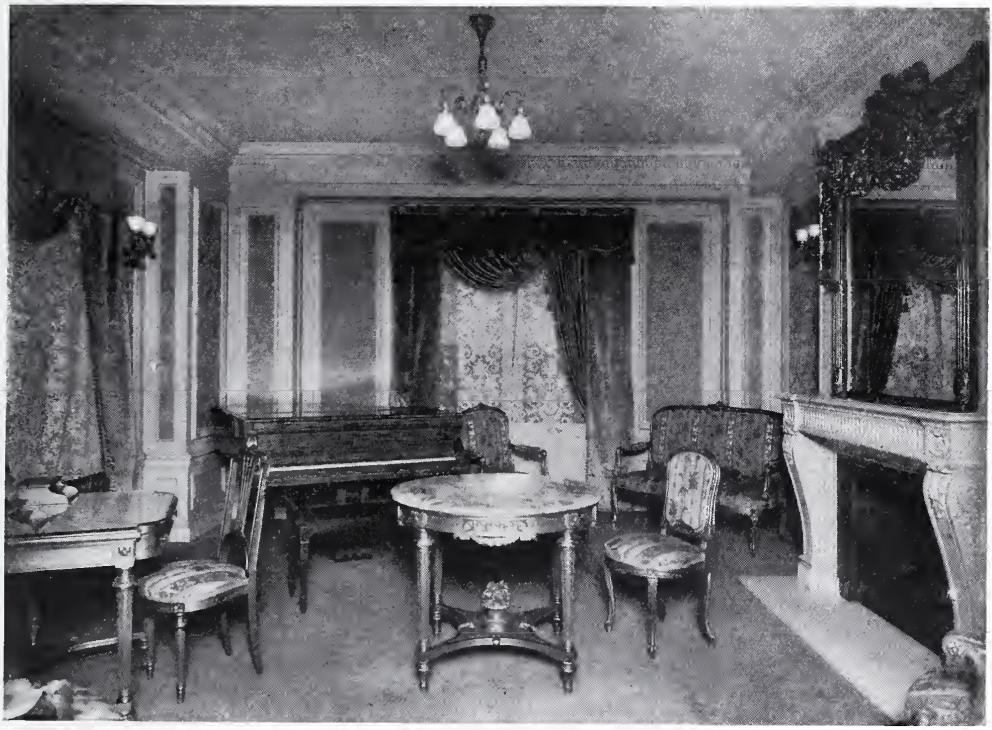


The Blue Fountain Room.

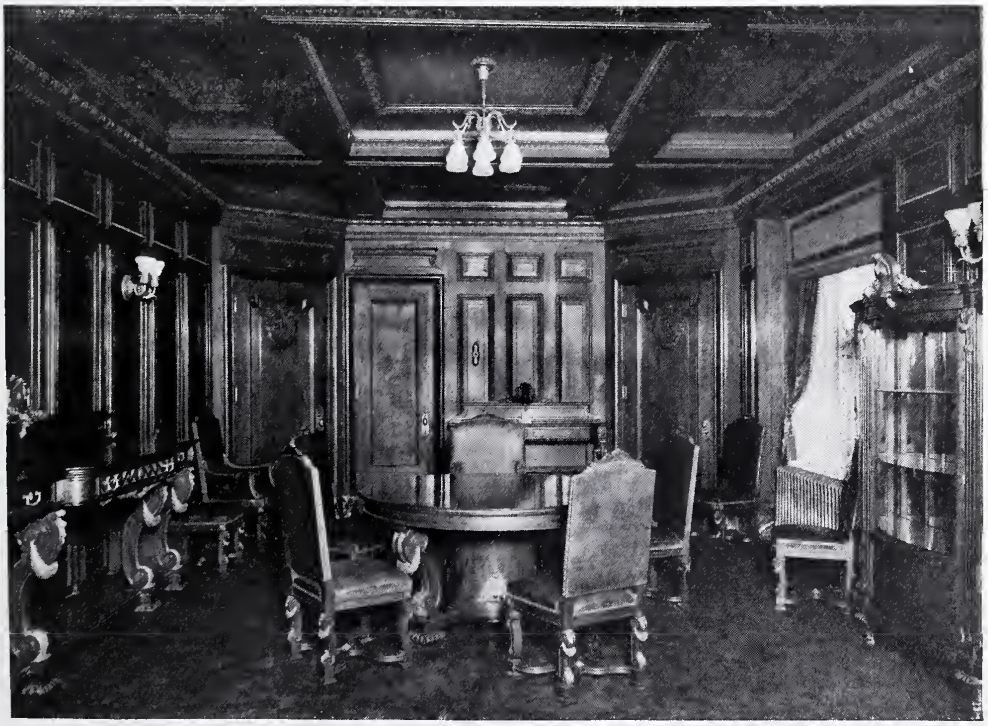


The German Grill Room.

HOTEL LA SALLE, CHICAGO, ILL.
Holabird & Roche, Architects.

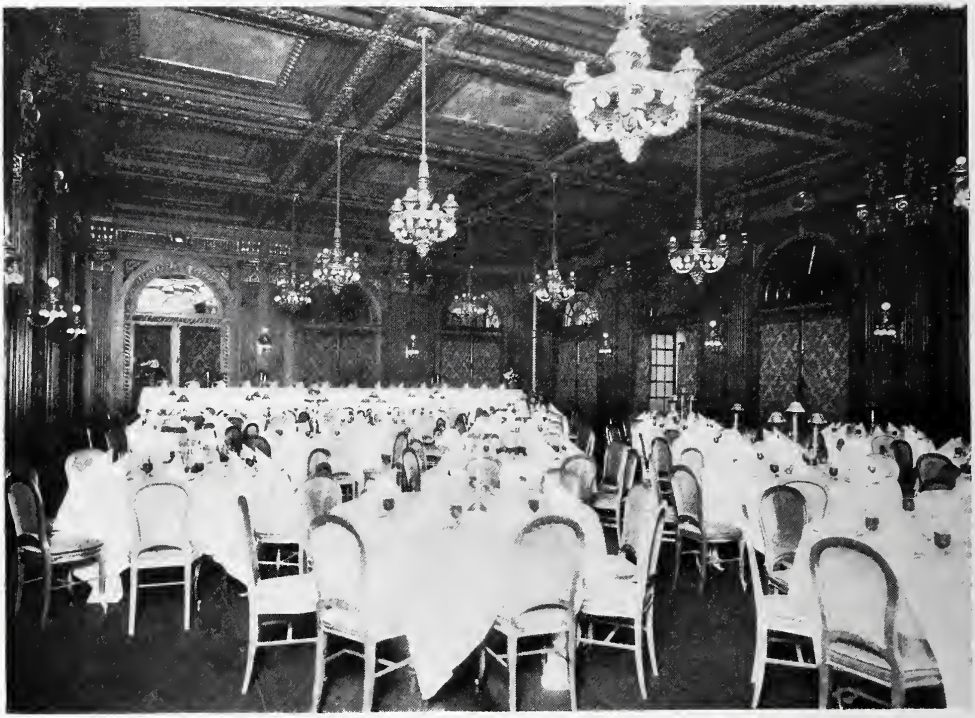


Parlor of the President's Suite.

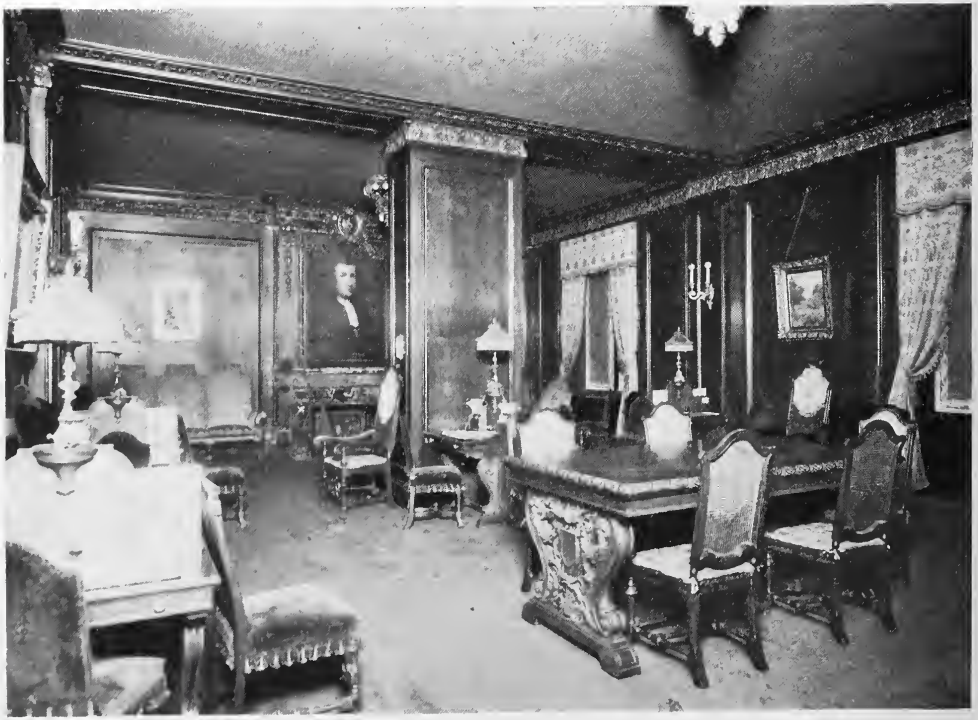


Dining Room of the President's Suite.

HOTEL LA SALLE, CHICAGO, ILL.



Private Banquet Hall.

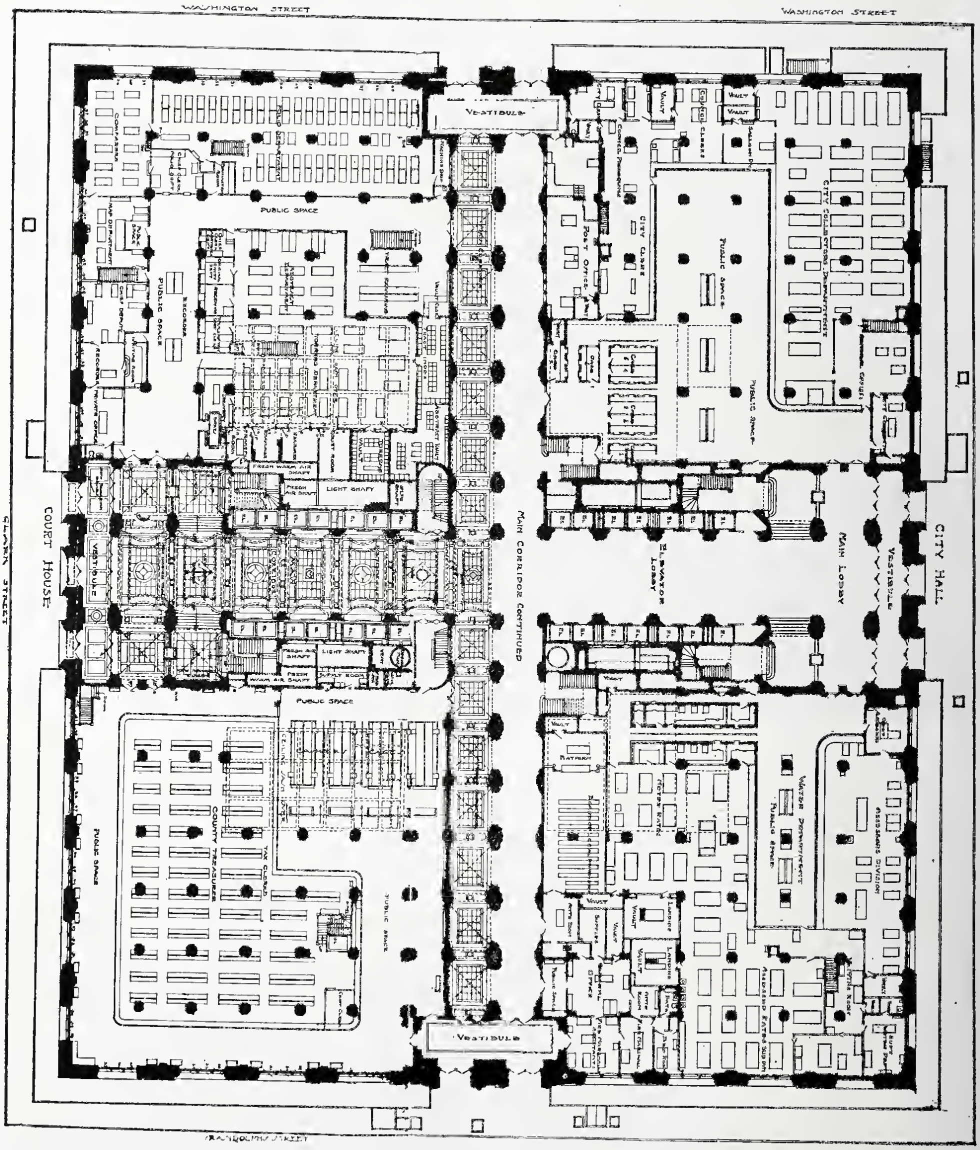


Writing Room.

THE LA SALLE HOTEL, CHICAGO, ILL.
Holabird & Roche, Architects.



STODDARD-DAYTON BUILDING, N. E. COR. 25TH ST. AND MICHIGAN AVE., CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.



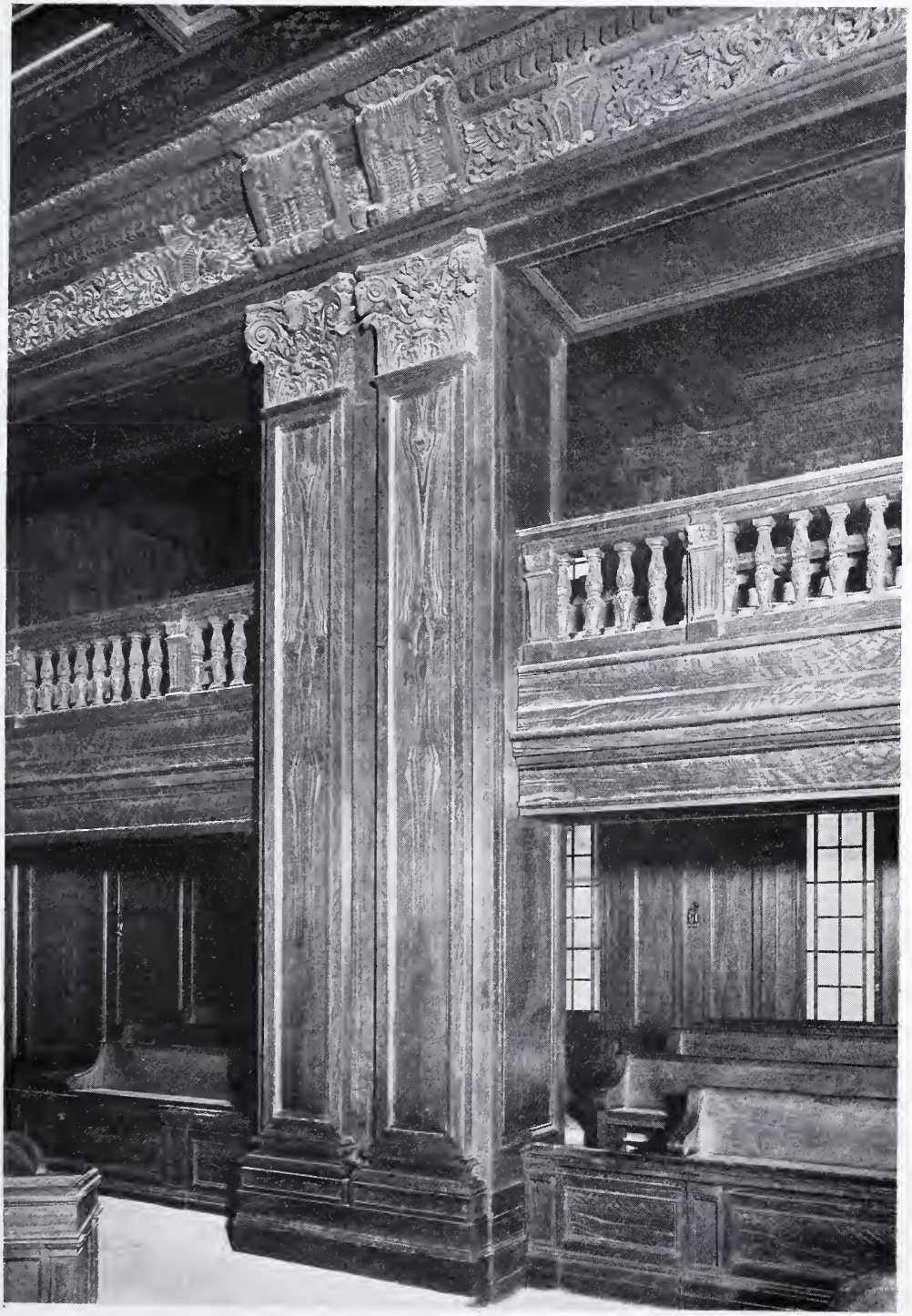
FIRST FLOOR PLAN, COOK COUNTY COURT HOUSE; CHICAGO CITY HALL, CLARK, RANDOLPH, LA SALLE AND WASHINGTON STS., CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.



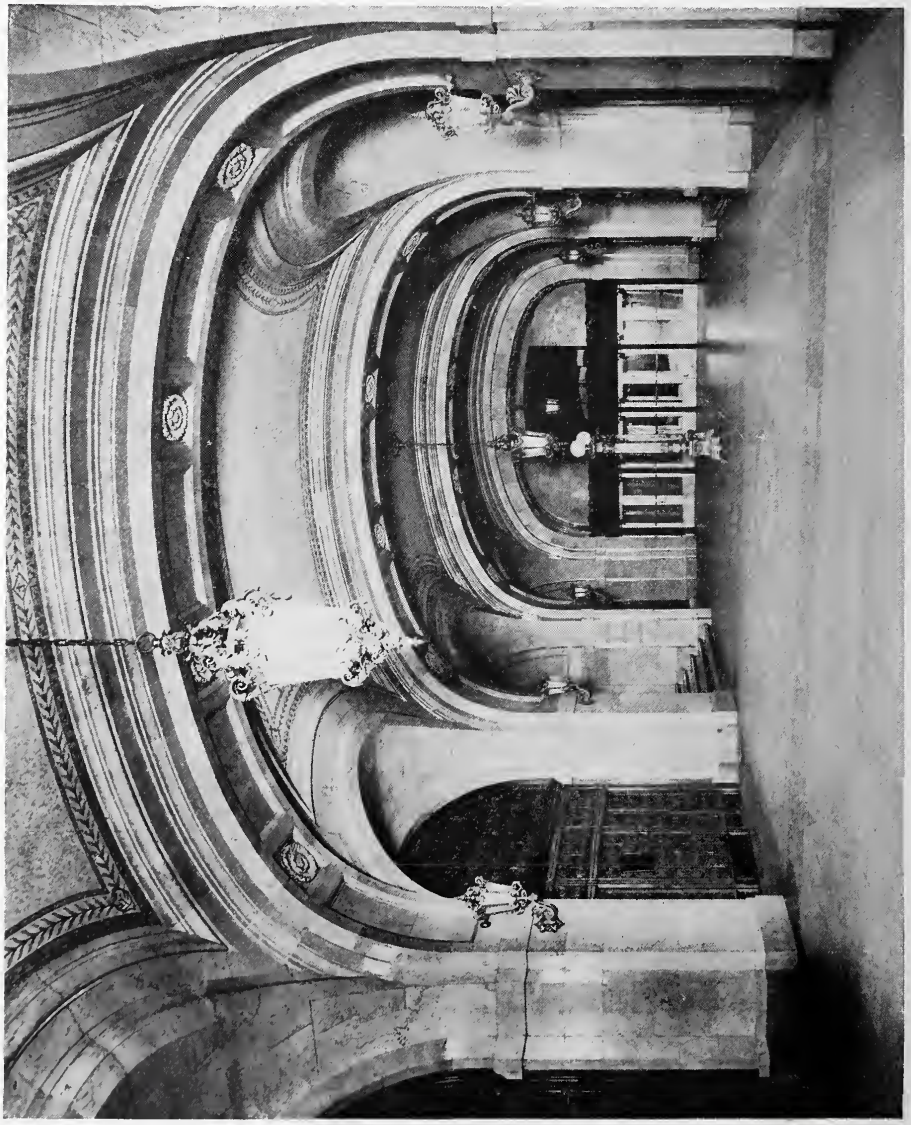
THE COOK COUNTY COURT HOUSE AND CHICAGO CITY HALL, WASHINGTON, CLARK, RANDOLPH AND LA SALLE STS., CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.



CHICAGO CITY HALL, WASHINGTON, LA SALLE AND RAND STREETS. HOLABIRD & ROCHE, ARCHITECTS.



VIEW OF VISITORS' GALLERY, COUNCIL CHAMBER, CHICAGO, CITY HALL. HOLABIRD & ROCHE, ARCHITECTS.



SECTION OF CORRIDOR—COOK COUNTY COURT HOUSE, LOOKING TOWARD CLARK STREET.
HOLABIRD & ROCHE, ARCHITECTS.



COUNCIL CHAMBER, CITY HALL, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCH'TS.



Corridor.



Intersection of Corridors.

THE CITY HALL AND COUNTY BUILDING, CHICAGO, ILL.
Holabird & Roche, Architects



Typical Elevator Enclosure.

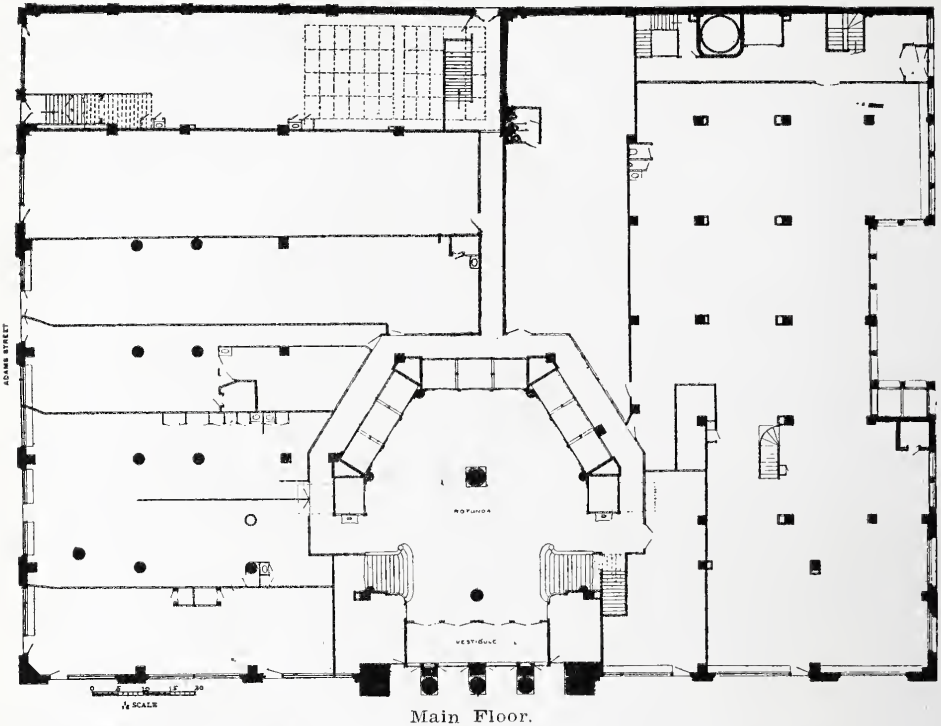


View of Washington St. Corridor, Looking Toward Entrance.

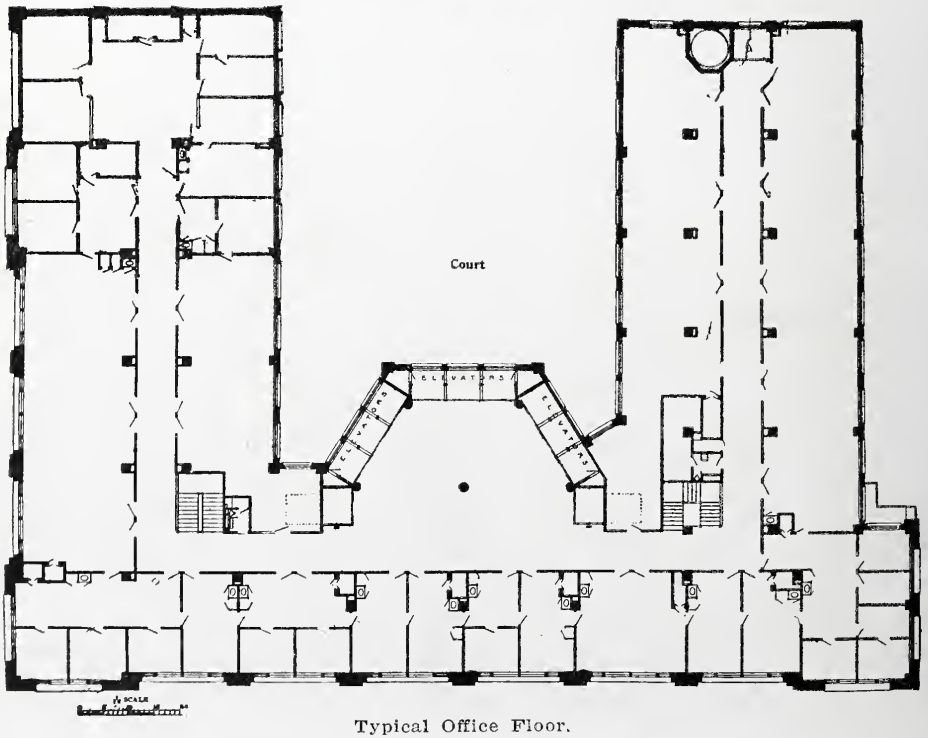
THE CHICAGO CITY HALL, CHICAGO, ILL. HOLABIRD & ROCHE, ARCH'TS.



THE TRIBUNE BUILDING, CHICAGO.
HOLABIRD & ROCHE, ARCHITECTS.



Main Floor.



Typical Office Floor.

THE MARQUETTE BUILDING.
Holabird & Roche, Architects.



DECORATIVE PANEL IN
THE MARQUETTE BUILDING.



DECORATIVE PANEL
"COUNCIL OF PEACE,"
MARQUETTE BUILDING.
Holabird & Roche, Architects.



Panel of Marquette.



"Black Hawk" Panel.



Panel of Joliet.

DECORATIONS IN THE CORRIDOR OF THE MARQUETTE BUILDING, CHICAGO.
Holabird & Roche, Architects.



Panel of Chicagon.



Panel of Tonty.



Panel of Frontenac.

DECORATIONS IN THE CORRIDOR OF THE MARQUETTE BUILDING.
Holabird & Roche, Architects.



LELAND HOTEL, SIXTH ST. AND CAPITOL AVE., SPRINGFIELD, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



The Banquet Hall.



The Café.

THE LELAND HOTEL, SPRINGFIELD, ILL.
Holabird & Roche, Architects.

man Grill Room in the La Salle are equally successful in their several ways, while the ball room of the same, with its succession of elliptic arches and lunettes, is one of the most impressive "palation" things of its kind that we have to show.

All these things, you will observe, are not in the least embodiments of the "Chicago idea." They are exercises in academic architecture, workings out, according to the skill and ingenuity of the modern designer, of motives not developed in the first instance from the facts of the particular case, but adapted to the particular case from historical precedents. It would be absurd to describe the designer of them as in any sort or sense a pioneer. The highest praise to which he can aspire is that of a scholarly artist or an artistic scholar, and this praise, as the illustrations show, he not infrequently attains. In such domestic or quasi-domestic building as our architects have had to do, a very small proportion of their total output, the modest and safe Georgian which we call "Colonial" has been their chief resort, and it has been adapted and executed in a spirit of comity, which is indeed the badge of the style, and with scholarly skill.

No doubt, however, the work of Messrs. Holabird & Roche which puts them most in view and gives them their rank among American architects, is the huge twin monster of the Cook County Court House and Chicago City Hall. With this they have supplanted a similar double erection which was for a generation a political, social and architectural scandal to Chicago. This is strictly an academic study. Nobody can pretend that there is any future in this, anything but the reminiscences of an immemorial past. Even, unlike its classical predecessors, it is a contradiction in terms. In fact it is a steel frame ten-story building of similar and equal cells, like the common skyscraper. Necessarily its apartments differ from one another in magnitude, importance and function, but there is no pretense of expressing these differences in the exterior architecture. What is asserted is that the division denoted by the great columns is superior in importance to the lower divisions from which the order is omitted, and this is distinctly "not so." The real inequalities are suppressed, and inequalities which do not exist are asserted. Of course, this is the contradiction which we always encounter in modern examples of monumental classic, and, of course, having once noted them, we have to ignore them and to admit that it makes all the difference how they are done. The present example is very well done. There is undoubtedly an awkwardness in the infringement of the solidity of the terminal pavilion, caused by the interposition of a big window between the capitals of the pilasters, and indeed by the general scale of the openings in this pavilion, which should manifestly have been kept as solid as possible. Nevertheless, the thing is greatly impressive. In "scale" the order exceeds anything west of Albany, and is about twice that of Isaiah Rogers's old Custom House in New York. This would, of itself, make a building noteworthy anywhere, but it is also to be said that it has been well and faithfully studied in mass, in scale, and in detail. It is not only much the most impressive thing of its own kind that Chicago has to show, but one of the most impressive in the United States, and in the interior, as the illustrations show, there is not only a faithful study of style, but features which show an escape from the style into vigor of individual invention, and a richness, which has even elements of novelty in decorative effect.

Statistics of the Construction of Chicago's Big Municipal Building

(One-half only of the Block)

Compiled for the Chicago Tribune.

Wrecking old City Hall began Aug. 11, 1908; site cleared April 15, 1909.

Construction company began work April 15, 1909, under contract to complete new City Hall by Oct. 15, 1910. Delays caused by labor troubles and investigation of work extended time of completion.

Two men were killed in wrecking the old building; two were killed in the new superstructure. But no skilled worker lost his life.

A maximum of 750 men on day shift worked on the new building.

More than a score of skilled artisans and trade organizations worked upon the new structure to its completion. They were, in detail:

Trades	Maximum Numbers
Structural Steel	100
Sheet Steel	100
Carpenters	100
Marble Workers	135
Painters	65
Plasterers	40
Tile Setters	40
Machine Movers	25
Steam Fitters	22
Electricians	22
Lathers	20
Bricklayers	35
Glaziers	20
Plumbers	20
Ornamental Iron	14
Calkers	11
Granite Setters	8
Roofers	8
Gas Fitters	8
Cement Finishers	9

Approximately 40 per cent. of the $5,000,000 cost of the City Hall was paid to workers on the building.

What the returns of labor were in the manufacture of building material is hard to guess.

In the modern building of steel construction, 35 to 50 cents a cubic foot is basis of estimated cost.

New City Hall probably averages close to 40 cents a cubic foot.

The total "population" of the new structure will number, at an estimate, 2,975 city employes. Of this number 2,100 will be permanently located in department offices, and 275 in the service of the Municipal courts. Those who will be in the building only a portion of the time, such as inspectors for the various bureaus, detectives, and the like, are figured at 600.

Statements supplied by one of the chief engineers for Holabird & Roche to Hollis W. Field.

When Chicago's new $5,000,000 City Hall is thrown wide open to the scattered city officers, departments, bureaus, and the myriad animate and inanimate enginery of Chicago's city administration—that city square bounded by La Salle, Washington, Clark and Randolph Streets must become a show site to the Chicago visitor.

Twin brother to the New Cook County Courthouse in which the business of the county already is conducted, this $5,000,000 city hall completes the granite facades of the plat which for so long in the making of history of Chicago and of Cook County has become so often consecrated—and so often desecrated—public grounds.

Two hundred and four feet high from the sidewalk level to the top of the parapet walls 370 feet long on the La Salle Street side, and 157 feet wide on Washington and Randolph Streets, the twelve floors of the new City Hall aggregate almost thirteen acres of available floor space. Below the sidewalks the floors of the sub-basement lies thirty-eight feet six inches down, while the trench for coal and ashes connecting with the lines of the Illinois Tunnel Company is forty-eight feet below the feet of pedestrians in the street. Thus from the uttermost depths of the sub-basement to the top of the parapet walls the height of the City Hall is 252 feet.

Are you interested in statistics? There are typewriter pages of them which would hold you. The builders put 21,000,000 pounds of steel into the structure and 324 standard cars were required to haul the steel from the mills. As foundation supports the old "floating" foundations of the old buildings gave way to the caissons, or walls, dug to an average of seven feet in diameter to bed rock, and filled with concrete. There are 124 of these caissons, of which 112 go to bed rock 114 feet down; twelve of them stop on hardpan.

Fourteen miles of rivets were driven home



NURSES' HOME, COOK COUNTY INFIRMARY, OAK FOREST, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



Administration Building.



Superintendent's House.
COOK COUNTY INFIRMARY, OAK FOREST, ILLS.
Holabird & Roche, Architects.

in the steel superstructure. Numerically there are 162,000 individual rivets tapped home at white heat by the clattering pneumatic riveter, which may have struck twenty-five to forty blows to a rivet. How many blows in riveting?

"Concrete" is a silent sort of general topic to Architects Holabird & Roche. It cost the city about $5,000 to investigate a possible $127 worth of concrete on a few columns that afterward were declared to be quite reasonably good under the pure food and drug act. Exclusive of the concrete which the investigators dug out, 33,278 cubic yards of concrete went into the construction.

For the outer walls and columns of the building, 180,000 cubic feet of granite, weighing 30,000,000 pounds, cover the steel work, while of terra cotta fireproofing there is a total of 1,240,000 square feet and 150,000 linear feet of girder covering. Of brick there are 2,700,000 common, 520,000 hollow brick, 400,000 enameled brick, 92,000 gray faced brick.

These are only a few of the myriad statistical facts concerning the construction of the huge new Chicago City Hall, which once more is to gather under its roof an almost undivided machinery of the city government. From the rooms on the eleventh floor devoted to the municipal courts, down to the public comfort station in the basement of the Washington and La Salle Street corner, the Chicago citizen must feel his personal interest somewhere in the finest type of municipal building in the country.

Of this new City Hall as a reality, an intersting phase of its design and building may be recalled. At the time Cook County accepted plans and specifications for the twin County building, the possibilities of a new City Hall were intangible, mixed, involved and evanescent.

In building the County Courthouse, however, the architects went so far as to take a chance that when the new City Hall did materialize, it might be of twin construction. In the days of the old buildings an alley ran between them from Washington to Randolph Streets. The County Building absorbed its half of that alley and the architects and builders arranged on the blank alley wall for all necessary steel structural connections in case the city decided to follow the county's plans. In the final acceptance of the twin plans, the builders had only to cut into the cement for the necessary steel anchorages.

Incidentally at the time of placing the granite corners complete at the northwest and southwest corners of the new County Building, there were comments that it was an undue expenditure of money, merely in view of the fact that the city building hadn't been planned.

"What's the use of completing the unfinished west side of the County Building, corners and all, when we don't know what the City Hall will be?" was the question.

These corners were completed, however. Now after the connecting and approaching completion of the City Hall, the observer may look at these corners that only a comparatively few months ago gave finish to the County Building, and find the whole of the granite finishings adorning the same northwest and southeast corners of the City Hall.

"We had only to take down the granite, have it cleaned and it went over into the corners of the City Hall as if the material had been cut for the purpose wholly," said Supt. H. L. Marsh.

As a representative of Holabird & Roche, architects, Mr. Marsh has done much of the "sitting up with" this new Municipal Building. He says that of all the "sittings up" with the work, none brought greater strain than in those summer nights of 1909 when those four great girders on especially built wagons, drawn by ten horse teams, began moving from the steel works, far up the north branch, down by way of Rush Street Bridge to the City Hall site.

"Probably no such load ever has been put upon a wagon as was that 88,000-pound girder which overhangs the council chamber," said Mr. Marsh. "We could hope to move it only in the night, after the last of traffic virtually was gone from the streets. Rush Street Bridge was the only bridge on which we could cross, and then only after we had laid a steel track for the wheels.

"At the building, one engine hoist has been used on every other piece of steel. On this 80,000-pound girder, as on the 75,000 and the two 70,000-pound girders, two engines were set and the steel grappled at each end. With the council chamber on the second floor, two floors in height to ceiling, and each of these big girders to clear the ceiling of the chamber and rising a full floor space to the level of the vault floor, you can imagine how I sat there with cold chills and hot feverishness alternating, hoping that no accident would occur in either engine to stop the steady, even raising of those loads. Yet there wasn't a kink in the handling of one of them!"

To the uninitiated these great girders may be said to have come into shape and weight to take the place of the steel columns which had to be displaced in the great chamber



RESIDENCE FOR MR. MILVILLE N. ROTHSCHILD, 37TH ST. AND MICHIGAN AVE., CHICAGO.
Holabird & Roche, Architects.

measuring 65 x 96 feet over all. Steel columns would have been impossible in the chamber. Dropping them at the second floor, and allowing another floor space to the chamber ceiling and the gallery, gigantic steels were necessary to take upon them the columns that should continue up in order to the twelfth floor of such a structure. In brief, these girders just over the heads of the coming city councils will be supporting the portion of the nine floors above at the north end of the building.

This north portion of the building housing the council members is the show place of the new City Hall.

The council chamber proper will measure 43 x 96 feet, with the gallery beyond the rails of like length and 22 feet wide. The trimming is of imported English oak veneer and was manufactured in Philadelphia. Frederick Clay Bartlett is engaged to execute the mural decorations. The paneling of English oak is "matched" in the sense that the same section of the quarter sawed wood opens out, book-like, to show the grain as one. The ceiling will carry appropriate decorations in tiles.

On the Randolph Street front of the council chamber is a retiring room, as it is an entrance room, for the Aldermen. At one end of a long, corridor-like room, 20 x 80 feet, is a lavatory, and at the other end telephone booths. Two great fireplaces are set of Bedford stone on the Randolph Street wall of the retiring room, while the partition panels separating it from the council chamber hide each a locker for an Alderman. This retiring room is finished in American oak, with beam-paneled walls. The fireplaces especially are considered artistic features of the room.

On the La Salle Street side, entered from the council chamber, are the reception corridor for Aldermanic visitors, and beyond this the various committee rooms of the council body. There are fourteen of these rooms on the main and gallery floors of the chamber.

The Mayor, moving into the central portion of the La Salle Street side, and on the fifth floor, will command a room 40 x 90 feet, oak-paneled, decorated ceiling, and on this room Mr. Bartlett will lend his art in mural decorations, probably representing historic Chicago and its growth to the present. On the same floor he will have the



RESIDENCE FOR MR. LAWRENCE D. ROCKWELL, LAKE SHORE DRIVE AND GOETHE STREET, CHICAGO.

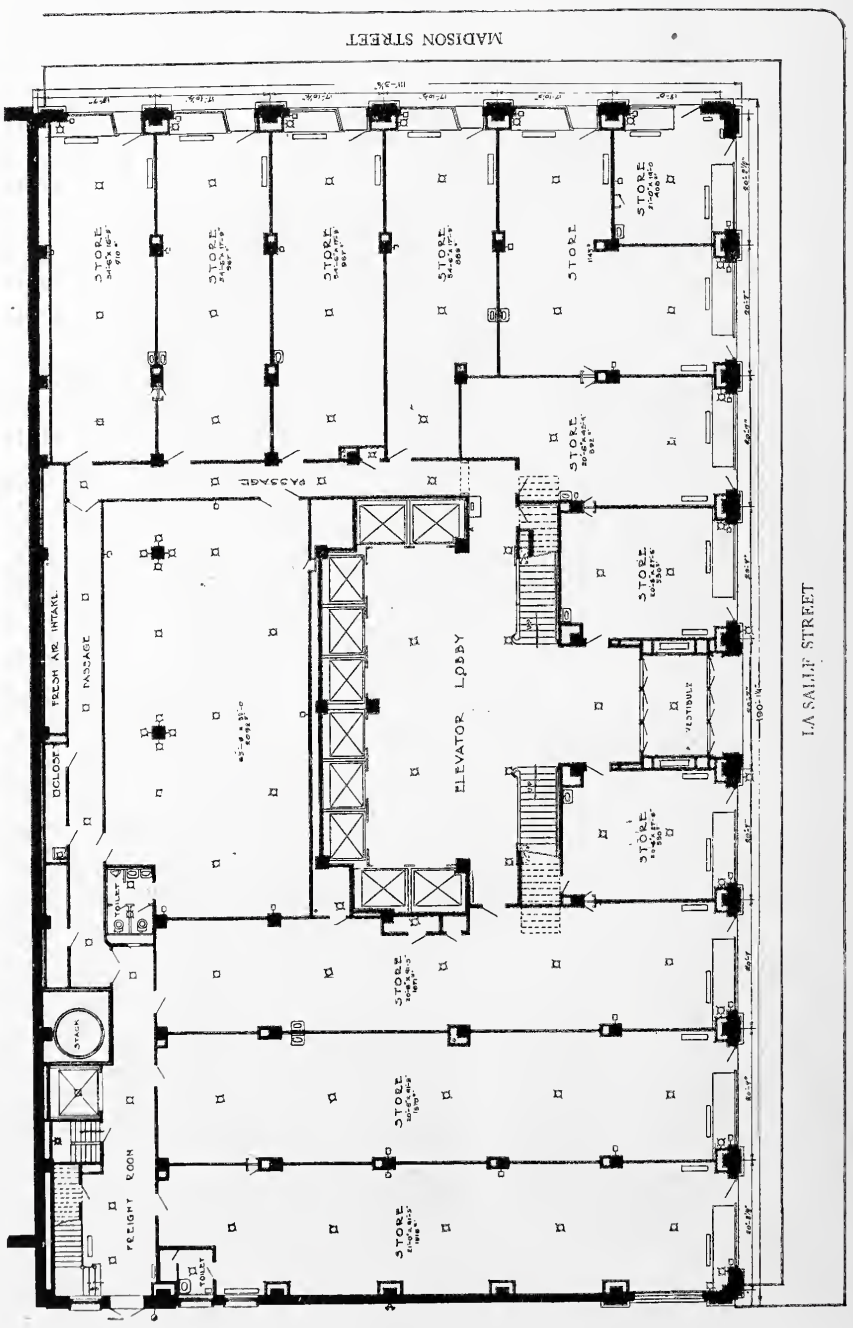
HOLABIRD & ROCHE, ARCHITECTS.



DETAIL OF MAYOR'S CHAIR, COUNCIL CHAMBER, CITY HALL, CHICAGO, ILLINOIS. HOLABIRD & ROCHE ARCHITECTS.



RESIDENCE FOR MR. ARTHUR T. ALDIS,
1258 LAKE SHORE DRIVE, CHICAGO.
Holabird & Roche, Architects.



GROUND FLOOR PLAN, SHOWING ENTRANCE AND STORES
OTIS BUILDING, LA SALLE AND MADISON STS., CHICAGO, ILL.
Holabird & Roche, Architects.



THE OTIS BUILDING, COR. MADISON ST. AND LA SALLE STREET. HOLABIRD & ROCHE, ARCHITECTS.

heads of the police department, the city controller, and corporation counsel—all within easy reach.

One of the most interesting of the floors is that devoted to the Commissioner of Health, the Health Department taking three-fourths of the seventh floor, and leaving the remnant to the Building Department.

In this section devoted to the Health Department, every feature of the work of the Bureau has been anticipated. In the laboratories equipment alone the cost is about $15,000. For drainage of chemicals used in laboratory tests, 600 feet of special tile and concrete piping has been installed, for the reason that the ordinary drain pipes would be eaten out by acids that are discarded.

Another of the interesting floors of the new building is the vault rooms, unnumbered as to floor but lying between the numbered third and fourth floors. On this floor of steel, containing fireproof steel rooms, are 47,760 square feet of available locker space.

In the general arrangement of the great building from the sidewalk level up, the various departments, bureaus and court rooms may be listed as :

Ground Floor—City Clerk; City Water Bureau, and its inspectors and collectors. Office of the Fire Department Chief.

Second Floor—City Treasurer; Board of Local Improvements.

Third Floor—Election Commissioners.

Vault Floor—

Fourth Floor—City Engineer, Commissioner of Public Works.

Fifth Floor—Controller; Chief of Police and Assistant; Mayor; Corporation Counsel.

Sixth Floor—City Attorney; Electrician; Civil Service Commission; Fire Alarm Station.

Seventh Floor—Health Department; Building Department.

Eighth Floor—Municipal Court Clerk; Court Rooms.

Ninth Floor—Chief Justice's Room; Court Rooms.

Tenth Floor—Board of Examining Engineers; Track Elevation Bureau; Small Parks Commission; Library; City Architect; Examination Rooms; Civil Service Department.

Eleventh Floor—Municipal Court Rooms.

Twelfth Floor—Penthouse; Elevators; Water Tanks, Etc.

Reaching to these floors are fourteen electric passenger elevators, of which twelve have a carrying reach of 181 feet; one has a stretch of 196 feet upward, and one 238 feet. Each machine is of thirty-five horse power, lifting 3,500 pounds at 500 feet a minute; two of these are adapted to 5,000 pounds load and travel 200 feet a minute.

In the basement are public comfort stations for men and for women, entered at the Washington and La Salle Street corner of the building. Wildernesses of machinery, dynamos, motors, pumps and pneumatic tube accessories fill this main basement. In the sub-basement, thirty-eight feet below the sidewalks, are the boiler plants necessary for heating the building and providing hot water.

Ten feet below this level the channel for taking in coal and removing ashes makes connection with the lines of the Illinois Tunnel Company. To load the great coal bins from the tunnel level, conveyors receive the fuel from the cars and dump it into the bunkers. From the bunkers this coal is fed to the boilers in like manner, while by reversing the machinery, ashes are lifted to waiting cars—all without a touch of hand labor. In case of accident to the Tunnel Service, coal may be received from the sidewalk level and ashes raised.

How much the citizen is interested in matters in the Chicago City Hall may be suggested in the 750 telephones that are distributed through it. There are twenty-five branch exchange switchboards, to be in touch with the old City Hall Call, "Main, double four seven." Bells and annunciators to the number of 650 are distributed through the building.

The Noel Construction Company took possession of the site of the new building on April 15, 1909. The time for completion was eighteen months, but labor troubles have interfered. The corner stone was laid on July 20, 1909. Into a copper lined box were put copies of the daily papers, names of the city officials, and various other contributions from individuals. Incidentally it may be recalled that when the old building was torn down, no trace was found of the box in the old corner stone and no relic of the dedication unearthed.

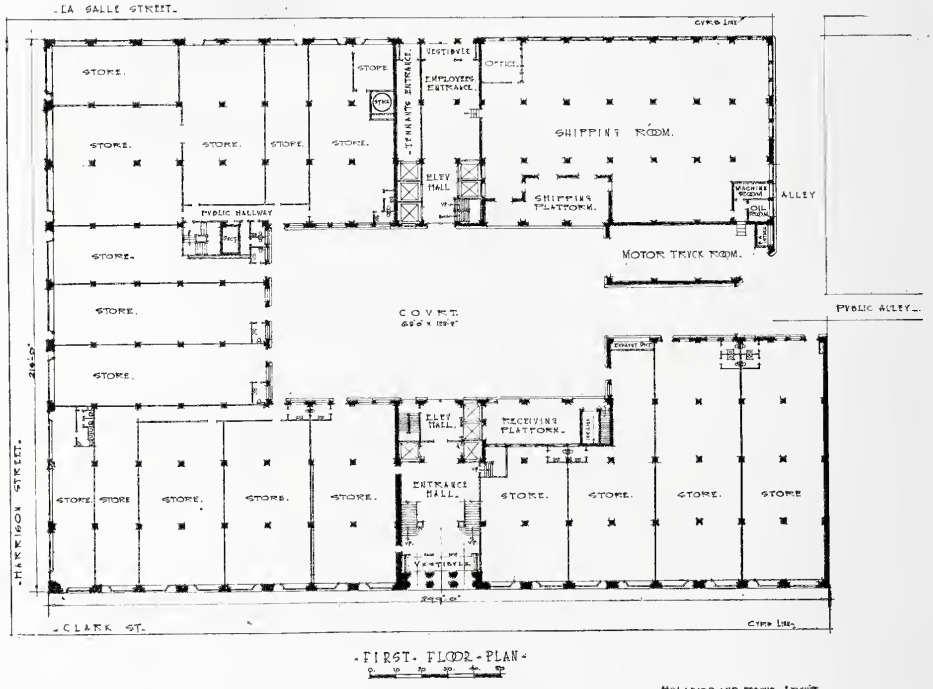
Toll of four lives were taken in the building. One man died in the wrecking of the old building; one was killed in an excavation; two laborers were killed in the superstructure. But no skilled steel worker lost his life, which was a departure from precedent.

Now that the new City Hall is ready and occupied the growing Chicago idea of gardens upon Chicago roofs has been taken up with reference to the twin building in the City and County Square.

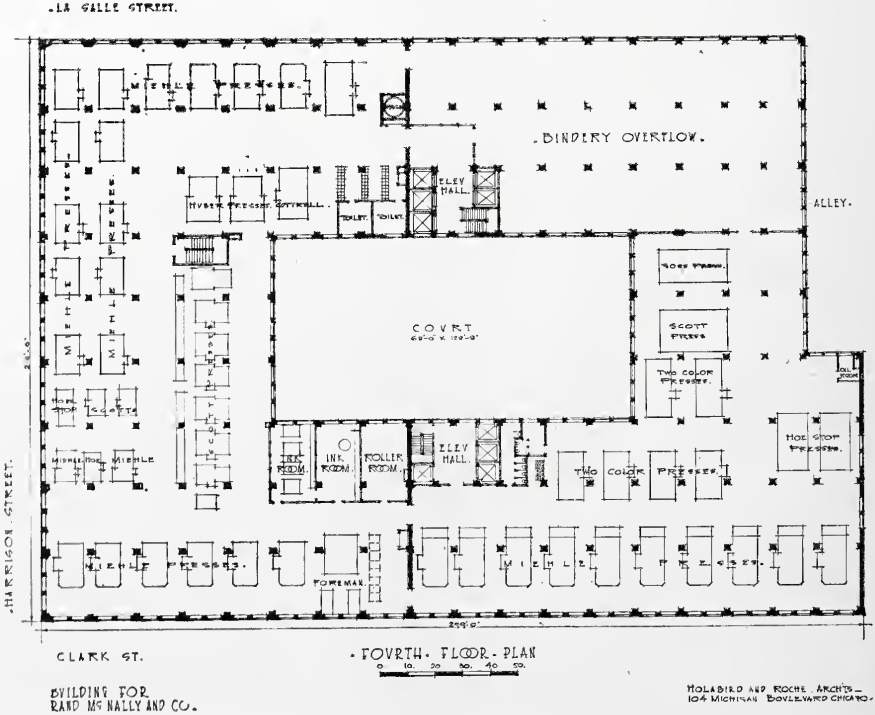
The roof area of the City Hall and the County Building combined approximates two acres. Two acres of summer garden in the heart of the loop district, and 200 feet above the hot pavements on a hot sunny day,



RAND McNALLY BUILDING, CLARK, HARRISON & LA SALLE STS., CHICAGO, ILL. HOLABIRD & ROCHE, ARCHITECTS.

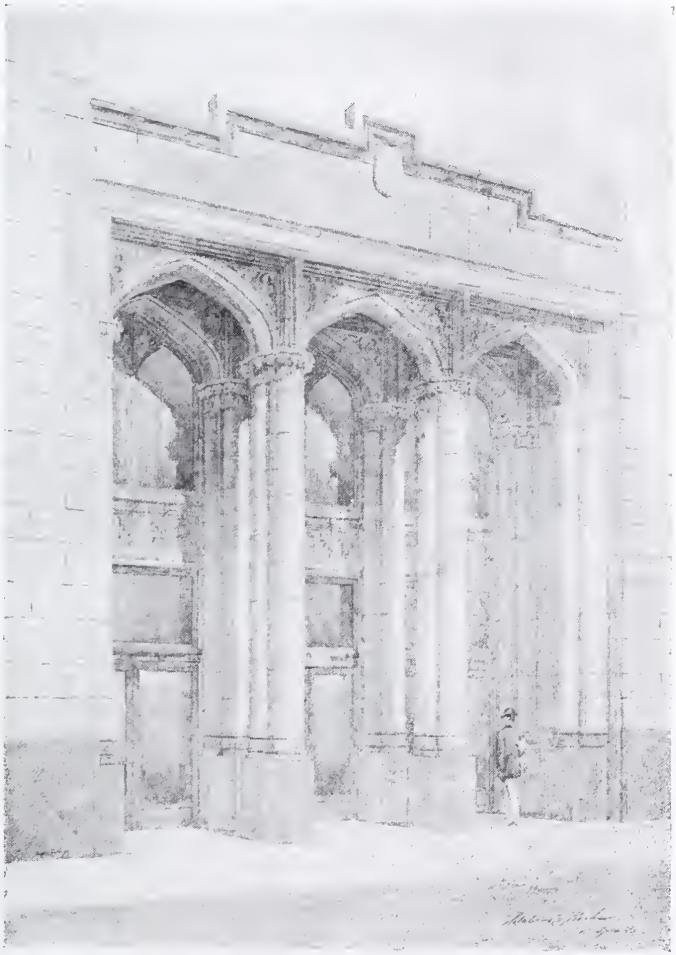


First Floor Plan.



One of the Press Floors.

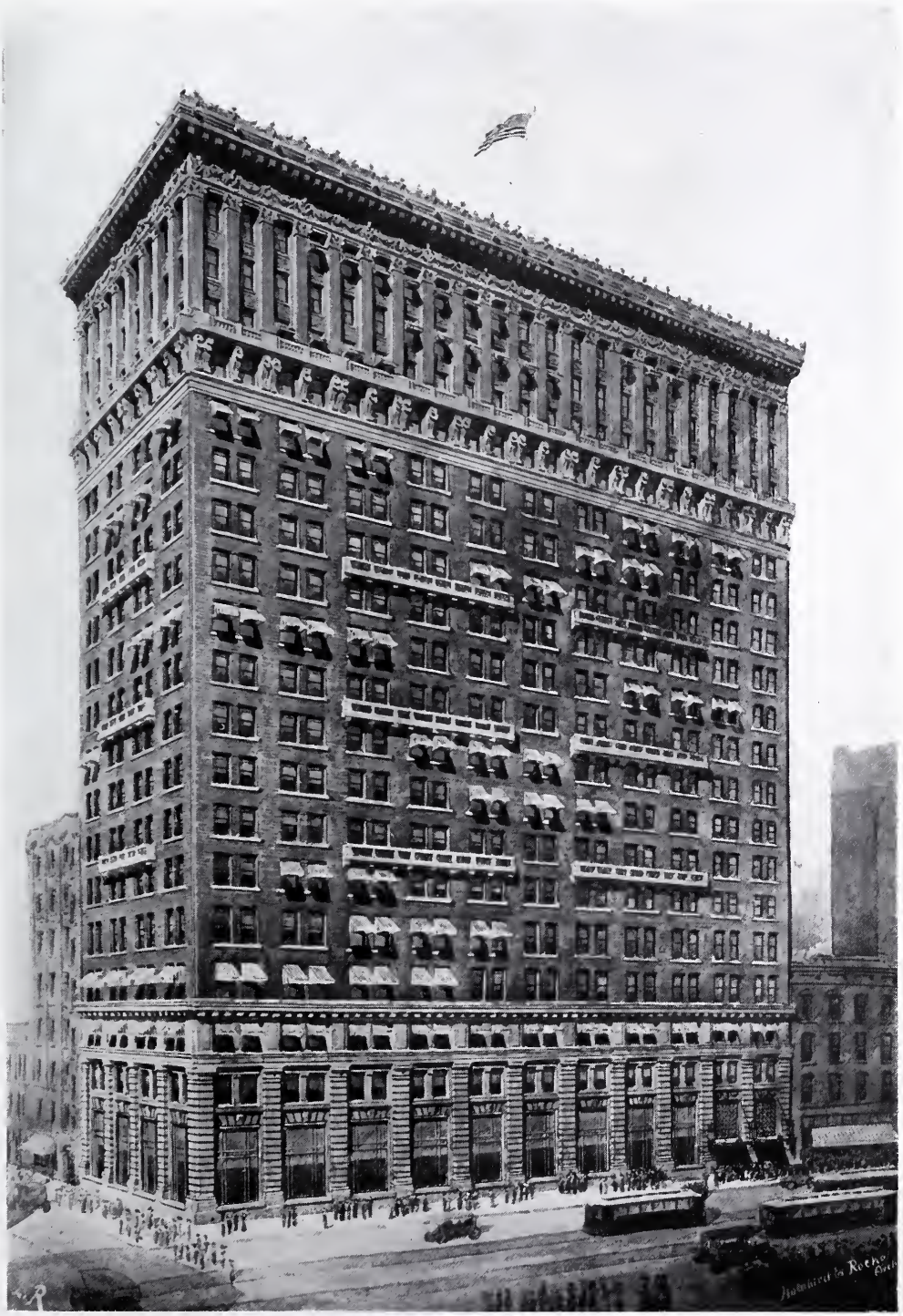
NEW RAND McNALLY BUILDING, CHICAGO, ILL.
Holabird & Roche, Architects.



DETAIL OF ENTRANCE, NEW RAND McNALLY BUILDING, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



CHICAGO SAVINGS BANK BUILDING.
HOLABIRD & ROCHE, ARCHITECTS.



NEW BUILDING, CHICAGO TELEPHONE COMPANY, CHICAGO, ILLINOIS. HOLABIRD & ROCHE, ARCHITECTS.



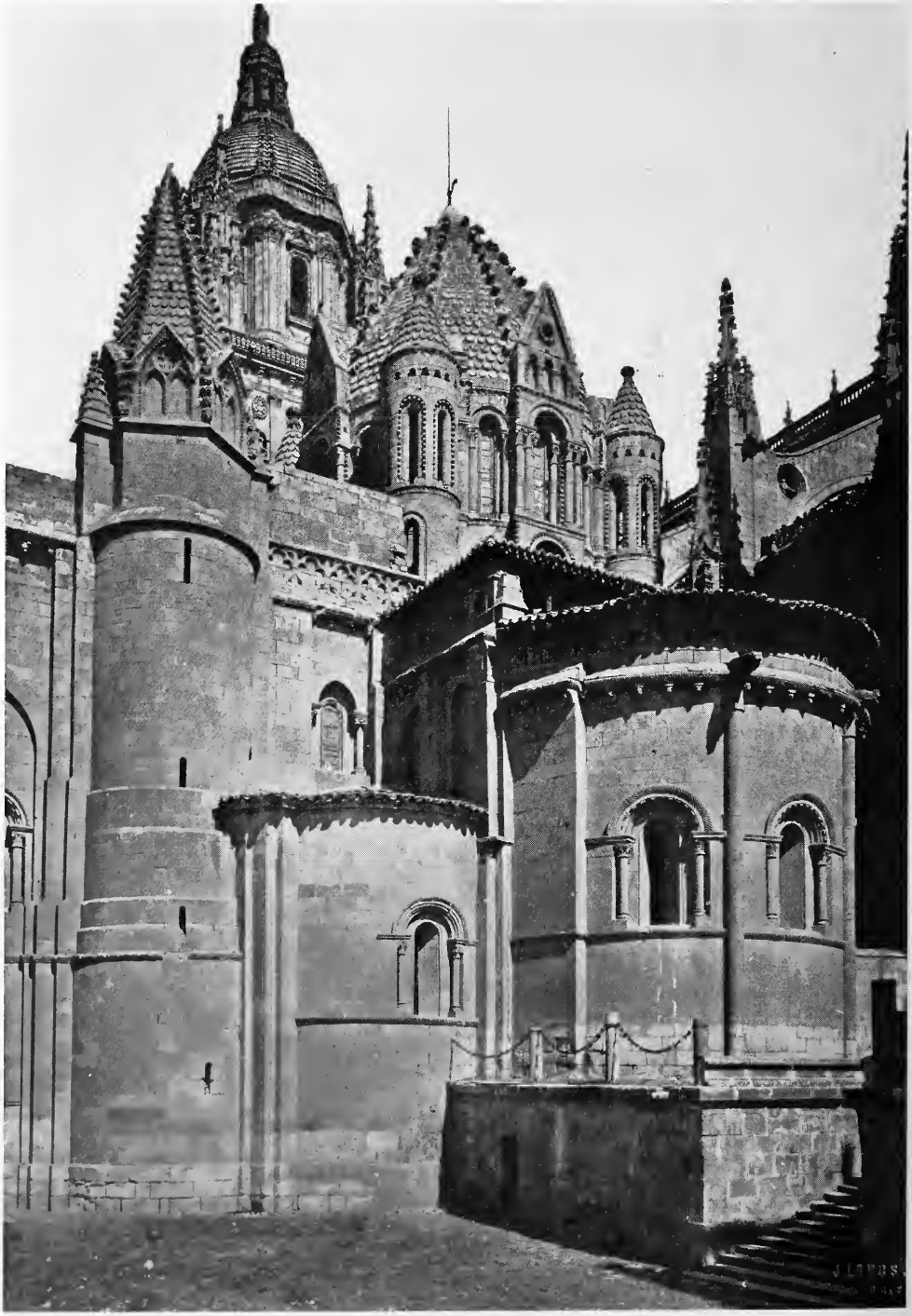
VIEW FROM WATER TOWER OF COOK COUNTY INFIRMARY, OAK FOREST, ILLINOIS.
Holabird & Roche, Architects.



Main Stairway Leading from Mezzanine Floor to Second Floor.
HOTEL LA SALLE, CHICAGO, ILL.
Holabird & Roche, Architects.



THE OLD COLONY BUILDING.
HOLABIRD & ROCHE, ARCHITECTS.



WHAT THE NEW CATHEDRAL HAS LEFT
VISIBLE OF THE OLD IN SALAMANCA.

A Study of Romanesque in Spain



Divided into Two Groups

Castile and Leon, and Catalonia



By M. Stapley
Photographs by A.C. Byne

THE TERM ROMANESQUE, to designate the architecture that sprang up in Western Europe between the end of the Roman occupation and the Twelfth Century, was adopted in 1825 by French archæologists. Previous to that date it had been variously termed Lombard, Saxon or Byzantine. To avoid such confusion it was decided to call it Romanesque since it, like the Romance languages, had a Latin foundation. Fergusson in his chapter on Spain discards this archæological baptism and calls it "Early Spanish Gothic." But the great Spanish churches of the Eleventh and early Twelfth Centuries have no more Gothic in them than is manifest in any other country where builders were ever striving to replace the ancient post and lintel roof by the stone vaulted one—the problem which Gothic finally solved to perfection. In fact, Romanesque was less tinged with Gothic feeling in Spain than in contemporaneous France. Even after several French Gothic cathedrals had been built south of the Pyrenees, Romanesque structures continued to rise and sometimes alongside of the newer style. So, discarding Fergusson's title and following the French definition: "Romanesque is the architecture that ceased to be Roman, though it still showed much that was Roman, and which was not yet Gothic though it already showed much that was Gothic," one is justified in classifying the churches to be treated of here as Romanesque.

The style came from France in the Eleventh Century. It extinguished a promising national architecture practiced by the remnant of the Visigoths whom the Moors had driven up into the northwestern corner of the Iberian peninsula. This architecture (called by Fergusson "Early Spanish Round-arched Gothic") had been developing for some three hundred years up in the Asturias when the new impulse came from without. Its coming may be accounted for by following that excellent French maxim *Cherchez la femme;* for it was because Spanish kings began taking French wives that Spanish architecture changed. These princesses brought with them their own bishops and retinues, and secured for them the best monasteries in Castile and León; and as the invaders were all skilled builders they imposed on the Spanish their more advanced methods.

At first they came from the Benedictine monastery of Cluny, where the Cluniacs were then building their own great Church, a superb specimen of Romanesque larger than any subsequent Gothic cathedral and accounted later one of the wonders of the world. The lavish patronage of the arts of building and decoration practiced by this house and the eight hundred monasteries affiliated with it offended St. Bernard, the most famous member of the new house of Citeaux, which had been founded to reform certain of the Cluny laxities; so St. Bernard preached and wrote against current extravagance in Church building and furnishing, and sent his Cistercians to every land to instil his ideas of sobriety. Thus it happened in Spain, that after the Cluniacs had enjoyed a certain supremacy, the new order of Cistercians came with their quieter ideas.

The Cluniacs had found the Spanish hardly yet formed into a nation and pos-

sessing a church architecture hardly yet virile enough to withstand superior French skill, so that they soon planted their vigorous Romanesque firmly in the country south of the Pyrenees. It came at a peculiarly favorable moment. People were rejoicing in Spain, as everywhere else, because the world had not ended in the year 1000, and their gratitude was expressed in new churches; but the circumstance specially propitious was the tremendous wave of religious enthusiasm roused when the Mohammedans were driven out of Toledo in 1085. Alfonso VI, the victor, having married (in turn) four French wives, the many French architect-monks that accompanied these queens to their new country were ready to respond to the call for more churches.

Thus was introduced an architecture that had already made great progress in France—barrel-vaulting, an accentuated cruciform ground plan and the erection over the crossing, of a polygonal dome or, sometimes, of a tower of several stages with arcades and a cap. Sanctuaries were square, and the east end was generally tri-apsidal or sometimes terminated in radiating chapels. But although Romanesque was started by French monks, and although they kept bringing from Burgundy, Aquitaine and Anjou fresh architectural influences, it would be a mistake to suppose that the Spaniards added nothing of their own to the newly-imported style. One feature distinctively Spanish is the *exterior gallery* peculiar to Segovia and its neighborhood; the domes of the Salamanca churches are another, due probably to eastern relations; and still another are the coupled ribs in the vaulting of San Millan at Segovia, traceable to the influence of the many Mudejars, or conquered Moorish workmen, who helped in the building of Christian churches. Beyond these few features, not even the most ardent admirer of Spanish architecture can claim that a distinctive Spanish Romanesque was evolved; but it is nevertheless highly interesting in its few points of departure, and would probably have resulted in a national style had not French Gothic come to swamp it.

Almost every city had its principal church erected by foreigners, and this structure determined the form of less important ones in the same region. This went on till the reign of Fernando el Santo, who brought a new influx from France, where Romanesque had completely given way to Gothic, and had them build his three great cathedrals of Burgos, Toledo and León. This was in the first half of the Thirteenth Century. Spanish Romanesque then may be said to have lasted throughout the entire Twelfth; in reality it overlapped Fernando's perfect pointed Gothic, for churches already started in the earlier style merely compromised by adopting certain features of the more recent one; these churches are generally classed as "Transitional."

Romanesque churches, as to their main characteristics, might be described as small, solidly built, bold and of dignified simplicity. They have an almost martial severity that accorded with the military spirit of the age. When first introduced they were round-arched but later adopted a slightly pointed form for main doorways while retaining the rounded in many of the details. Churches of this period are on the whole remarkably well-preserved (in truth, some of the best doorways are so preserved under zealous whitewash that their detail is almost unrecognizable).

Whether they are worth studying today depends on one's personal predilections. Many an excellent American architect considers Romanesque such an unused type that he need give it no attention; and the schools skip over it like a hurdle. But then may we not carry the process of elimination too far in our struggle to get only "useful" knowledge? Much of our food is not convertible into blood, yet serves a purpose. It would not hurt any architect to know more about Romanesque even though he may never build in it. Though it was a style that paid no attention to composition, it often happens that the mass is very beautiful and full of suggestion. Its detail is naïve and charming beyond all hope of emulation. We are too sophisticated ever to repeat it; but it is like a sort of



TORE CATHEDRAL, ONE OF THE FINEST OF ROMANESQUE COMPOSITIONS.

brain bath to see how the unlettered populace could yet read their Bible and their local legends in the carved capitals of columns or the arches of doorways. Romanesque produced no monumental sculpture, but in these minor story-telling forms it created (following Byzantine and early Christian models) a sort of realism that is (paradoxically enough) often decorative beyond later conventionalism, and which we try in vain to copy. Spanish Romanesque exemplifies this to a highly interesting degree. In larger ways, it exemplifies a wonderful inventiveness and boldness in solving the ever-recurrent roof-question. Its domes and its vaultings are superb, and of great variety; and as Señor Lampérez, the greatest living authority on Spanish architecture says: "Those who have praised Brunelleschi for the double dome of Santa Maria del Fiore should know that this arrangement existed in Spain (at Salamanca) two hundred years before Brunelleschi was born."

One may explain this inventiveness by the many curious circumstances that left their mark on Spanish Romanesque. There are suggestions of the East and of Italy, due, for instance, to the coming to Compostela of thousands of Christians from every land, and of the horde of Jew, Armenian and Syrian traders who followed to sell them relics and supplies all along the road. At any rate, Romanesque came nearer to being Spanish than did the Gothic which followed it. Furthermore it may be claimed that in no other country where Romanesque exists has it such harmonious setting. In mass the style is severe, fortress-like, medieval, even half-barbaric. The desolate but majestic plains of Castile and Aragón accord with it in all these attributes.



ENAMELED COPPER ALTAR FRONT FROM THE ABBEY OF SILOS NEAR BURGOS.

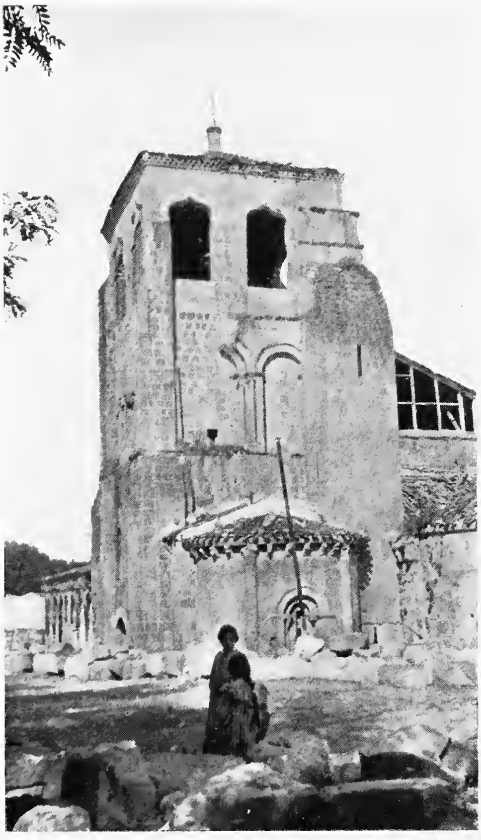
Old Castile and Leon

Alfonso VI's victory at Toledo assured everything north of the Tagus of peace from Moorish invasion. The old Castilian towns so long devastated by war were now ready for repeopling and rebuilding, and Count Raymond of Burgundy, Alfonso's son-in-law, brought an army of settlers in from France to join the Spanish colonists. The Castilian cities gradually attained a prosperity and security that made possible the erection of numerous remarkable buildings. To visit these one may come down from France or, leaving a Mediterranean vessel at Gibraltar, start north. By this last route, except for the Gothic cathedral at Granada, he has to travel all the way to Toledo before his enthusiasm for Spanish architecture is stirred; by crossing the Pyrenees one is at once upon the Castilian Burgos at the west or the Catalonian Gerona at the east, and these splendid old cities are promising foretastes of the rich feast that awaits him. Commencing at the west and omitting the provinces of Galicia and Northern León which require a considerable detour to visit, there is a glorious and direct pathway of Romanesque and Gothic both, as one travels through Castile, Aragón and Southern León (for although Zamora and Salamanca lie off the main road they are fairly accessible). Burgos, Avila, Segovia, Sigüenza, Zaragoza, Lerida, Barcelona, Gerona and Tarragona lie on the main road.

For a chronological survey of Romanesque, Santiago de Compostela, almost at the end of Galicia, should be the starting point. But being very remote, and important rather for the influence it had than for its present appearance, a student who has to consider time and money might satisfy his conscience by reading its history and pushing on direct to Burgos. Briefly, Compostela, claiming to possess the tomb of St. James the Apostle, was one of the most renowned shrines of Christendom and naturally the first spot chosen for a great cathedral. By the Twelfth and Thirteenth Centuries there were as many going to Santiago (St. James) of Compostela as to Rome, and among them were foreign kings, princes, noblemen and peasants from Europe and Asia. Many pilgrims staid; but whether they staid or went, it kept up a continual current of foreign influences all over northern Spain.

Santiago was begun about 1074 on a grand scale—as well it might be, for the pilgrims donated liberally to it. Its date, it will be noted, precedes the great Moslem defeat, and only the peculiar holiness of the shrine and its worshipers could have made such an ambitious undertaking possible at the time. In plan Santiago forms a Latin cross with a nave and aisles of eleven bays and a semi-circular central apse. As the choir had to be occupied by the tomb of the apostle, the *coro* was placed in the nave, a precedent followed ever after in all Spanish Gothic cathedrals as well. But of this magnificent Romanesque structure there is little left, owing to modern "improvements." Fortunately the splendid *Puerta de la Gloria*—the north portal—has been spared. But while the cathedral was yet intact, and indeed while it was building, Santiago cast a mighty Romanesque blaze over Spain that withered away the timid native Asturian style.

At, or rather near, Burgos, the finest Romanesque is the ancient Abbey of Silos, but it lies some thirty miles from the city at the end of a diligence and a donkey ride—which might not be bad if it only fell on one of the five days a year when the sun shines in Burgos. However, the cloisters are worth a long trip to see. The capitals and reliefs are from the Eleventh, Twelfth and early Thirteenth Centuries. Some are extremely rude and archaic, and seem to be copies of ivory carvings. But the freer ones show a splendid feeling for design in spite of their being stories in stone. Photographers are not welcomed by the Silos monks and the only records of Silos we could get were the spoils which the Museum at Burgos had managed to secure. Chief of these is the ancient copper altar front. It represents



SAN JUAN DE LOS CABALLEROS IN SEGORIA WHERE ZULUAGA HAS HIS STUDIO.

Christ and his apostles in a row of round-arched arcading with pierced shafts and capitals. The figures are in enamel of delicate color, the heads and architectural details in copper relief. The borders were once studded with precious stones. It is disputed whether this piece of work was made at Limoges or in Spain. The archives of Santiago cathedral give the names of many Spanish enamelers who worked there in the Twelfth and Thirteenth Centuries, and we know that the Moors were making enamels in Cordova far earlier.

In Burgos is the royal nunnery of Las Huelgas, founded about 1180 by Alfonso VIII and his English queen Eleanor. From the first only noble ladies were admitted to La Huelgas; its abbess was often a princess, and it was richly endowed. Yet it is severe everywhere, in obedience to the mandates of St. Bernard; for it is of the Cistercian order and it was built at the time when the Cistercians had ousted the Cluniacs from royal favor in many lands. Baedecker, following Street, classes it as Gothic; others as "Transitional." It was certainly different from the small and typical Romanesque cathedral which Burgos possessed at the end of the Twelfth Century; but also it is very different from the typical Gothic one which was started to replace the former in 1221. Bishop Mauricio of Burgos who had examined several fine French Gothic cathedrals was determined to eclipse the royal nunnery; so he urged Fernando the Saint to build him a cathedral in the latest French manner. In the lancet windows of Las Huelgas, in its small octagonal lantern over the crossing and in the carving of the north transept porch and



THE UNDISFIGURED ROMANESQUE DOOR OF ZAMORA CATHEDRAL.

cloister, the germs of its mightier Gothic neighbor may all be found. The south cloister of Las Huelgas, however, is purely Romanesque with round arches carried on coupled shafts with finely carved caps. So is the low unpretentious steeple.

Valladolid is the next city south of Burgos; but its Romanesque has all been swept away excepting the much altered Santa Maria la Antigua. From Valladolid the train runs to the great junction of Meidna del Campo and thence to the cities of Southern León, of which Salamanca, Zamora and nearby Toro are the most interesting and accessible. It may be worth mentioning that two different railroads operate in this section, and on one of them a mileage book is useless; thus Salamanca cannot be reached from Medina direct, but only via Zamora each way—not a pleasant prospect on a line



ZAMORA'S FINE TOWER AND LATE RENAISSANCE FRONT.



THE OUTER GALLERY OF SAN MARTIN IN SEGOVIA.

whose average speed is thirteen miles an hour. But, discomforts to the contrary, Salamanca's wonderful *Catedral Vieja*, or Old Cathedral, must be seen and seen first.

Even the most jaded tourist must acknowledge being impressed as he approaches this renowned town. It is in the centre of a vast treeless plain, scorched in summer, swept by icy blasts in winter, stretching in tawny monotony towards distant snow-clad summits; and out of this plain the only thing that rises is "Golden Salamanca" with its mighty domes. It seems peculiarly congruous that a great Romanesque cathedral, first cousin of Byzantine churches, should have sprung up in this Crimean-like landscape.

All this region was bare indeed after Moors and Castilians had battled on it

for three centuries; so Count Raymond brought many Basques, Gascons and other Frenchmen to help the Spanish repeople the ancient city; his Burgundians seem to have planned the first churches on the Burgundian system; but scarcely were these started when Jeronimo of Perigueux in the Aquitanian side of France came to be bishop of Salamanca; the upper portions of the churches then building proceeded on Aquitanian lines. Perigueux, it must be remembered, was where, in the first half of the Eleventh Century, a vast church with five cupolas had been erected in imitation of the Church of the Holy Apostles in Constantinople—an admirable union of Byzantine and Syrian influences with Roman. As the most striking feature of the Salamanca Old or Romanesque Cathedral is its dome, raised on an arcaded octagonal stage, it is supposed that the impulse for it came from Perigueux. Yet neither Aquitaine nor Burgundy can show anything as Eastern or as ingenious; for the French domes are not supported by pierced arcading and are consequently dark, while this one is splendidly lighted. Señor Lampérez is inclined to disclaim the Perigueux influence altogether. Bishop Jeronimo, he points out, had spent some time near the Silos monastery, which building once had a lantern quite similiar to Salamanca's, erected about the middle of the Eleventh Century, and due to the close relations between Silos and Monte Casino (mother house of the Benedictines where a school of artists from Constantinople was kept up). It is not improbable that Bishop Jeronimo may have seen the Silos dome and have planned to have one like it in his own see; although as he died in 1120 he never saw its completion. Whatever its origin, it is "a rare feature treated with rare success and complete originality." Street wrote that he had never seen "any central lantern more thoroughly good and effective from every point of view." Small wonder that our



SAN VICENTE, IN AVILA.

own Richardson saw in it an admirable prototype for the tower of Trinity Church, Boston.

Many conflicting dates are given for the foundation and consecration of this cathedral, but all we know is that it was in progress throughout most of the Twelfth Century. It is 175 feet in length and so massive that it has always been known as *Fortis Salamantina*. The groining is quadripartite throughout, but apparently the plan was originally to close nave and transepts with wagon-vaulting, for there is no support in the piers for groining ribs, which are received by little secondary, after-thought corbels over the main capitals. These corbels have statues in front of them as if to mask the fact. Had this change not been made the church might have looked very like San Martin, also in Salamanca, or like many another Burgundian church met with in Spain. But as the plan was suddenly changed we find the groining ribs and the superb dome with its double story of arcading, the lower round-arched and the upper cusped. Above, on the inside, the dome is ribbed. To resist the thrust four heavy pinnacles are built outside, also a stilted second dome over the first—this latter arrangement being the one used by Brunelleschi; only, the Spanish instance looks distinctly Eastern; the Italian one is a perfectly Renaissance form.

The old cathedral was abandoned as a place of worship when the new was built; but its strange Eastern flavor, its noble proportions, its many instances where the coming Gothic "casts its shadow before," its remarkable works of art, all combine to make this deserted temple a spot to linger in.



SANTO TOME, AN EARLY SALAMANCA CHURCH.

Of the exterior very little is left visible by the braggart new cathedral, but what there is stirs one's soul. For lovers of exquisite masonry nothing could be finer than this apse, turret, and dome (called *Torre del Gallo* from its iron weather-cock). The stonework is simple, broad, emerged from the crudity of



A DOOR OF SAN MILLAN IN SEGOVIA.



LA MAGDALENA IN ZAMORA,
THE BAROGUE OF ROMANESQUE.

most Romanesque, and displaying in its capitals and mouldings, restrained and delicate detail that puts to shame the rank late Gothic ornamentations sprawling over the façade of its neighbor. Then there is a very Spanish touch in the pierced cresting of the apse, and the altogether exotic feeling of the scaled and crocketed spires. The name of only one builder has ever been discovered in connection with this great structure—Maestro Pedro, who worked here in 1175. But we know that Maestro Pedro must have been one of a great busy swarm—French, Spanish, Greek, Syrian, Italian—that came from various countries to build Salamanca's cathedral just as later, men came from all countries to study at her famous university.

The next important Leonese city is Zamora north of Salamanca—a fiercely contested town in the long Cross-versus-Crescent struggle. It is to-day a dead medieval pile topping a steep red-brown cliff on the north bank of the Duero—the river that ran red when Ferdinand and Isabella repulsed the Portuguese at this point. Atop of the bare sun-parched cliff are the city walls and rising above them, clear-cut against the deep blue sky, is the cathedral with its square tower and its fine dome. Zamora is another of the cities to which French settlers and a French bishop came—the same Jeronimo who went later to Salamanca.

The Zamora cathedral, however, is not of his creating, but was started a quarter of a century after his death—in 1151. The original plan was like most Salamantine churches—nave and aisles of four bays, a western porch, transepts, dome and three apses. The transepts have preserved their pointed wagon vaults and it was clearly intended to roof the nave in the same manner, until the change was made in favor of quadripartite groining. The arches are pointed, the piers unusually massive and bold with square caps and bases. The central lantern is similar to Salamanca's except that it has but one stage of arcading. This does not mean, however, that it may have served as a tentative for the larger one, though here again exact dates are missing. From the outside it is less remarkable than Salamanca's as a piece of construction, but its squat form makes it all the more Oriental looking. The tower is an impressive one—splendid, square, fortress-like, as often seen in France, and defying St. Bernard's injunctions against any but a humble wooden belfry. But when the eye comes down from dome and tower, unlovely modern additions and obstructions awaken one's wrath. It is all pitiable except the south transept portal, the one illustrated. May this ever escape modern "restoring" architects, for it is the finest doorway in the Salamantine group.

Zamora cathedral is richly furnished, and if only no surreptitious removal of art treasures takes place it will always be a wonderful museum. Salamanca's son, Fernando Gallegos, one of the few Spanish primitives, is represented by a splendid canvas and a retablo. But for years past a leak in the roof has sent a stream trickling down over this masterpiece until now the stain is a deep discoloration. If money were lacking to repair the roof, Zamora's canons all look as if it would be beneficial to shape and health alike, either to climb up and try a hand at carpentering, or to use a week's allowance for the canonical larder and hire the necessary workmen. Most of the chapter are now too obese to rise from their stalls even when mass is being sung. These choir stalls, by the way, are late Gothic and were carved by the great German artist Rodrigo, whose fancy dwells lovingly on ribald scenes. A monk with fox's head is preaching to a company of hens with nun's heads. Or a nun flourishing a broomstick is driving a priest from the convent. The masterly carving and the beauty of those scenes done when the German was in a less jocular frame of mind, make these stalls fit to rank, along with his work at Plasencia and Ciudad-Rodrigo, among Europe's masterpieces of woodcarving. Yet hardly a statuette forming the little pinnacles on the arms of each stall but is loose on its base and ready to topple over. When the sacristan's attention was called to the fact he replied signifi-



THE INTERIOR OF "FORTIS SALAMANTINA."
ITS FLOOR HAS A DECIDED SLOPE.

cantly, "I know it, and soon they will mysteriously disappear and no one will take the trouble to trace them to some Paris antique shop." To this sombre prophesy he adds that whole cartloads of treasures were taken out of Toro's Collegiate Church by the clergy.

Zamora was once second only to Segovia, for Romanesque churches, but not many are left. Of these few La Magdalena is most interesting with its fine moulded door so richly carved that it might be called a sort of Baroque Romanesque.

Toro, also on a reddish cliff overlooking the Duero, is not far off, and in spring, its stretches of cherry and almond blossoms make a strange contrast



THE NEGLECTED CLOISTERS OF THE OLD CATHEDRAL, SALAMANCA.



A VIEW OF SALAMANCA AND THE ROMAN BRIDGE.

to the rest of the ruged bare landscape. In its cathedral, or rather Collegiate Church, are many architectural discrepancies, and yet it presents the most striking ensemble of the whole period. Its central lantern is modeled after Salamanca's but because it has a flat roof instead of a dome, the bizarre Eastern element is lacking, and one's thoughts fly to the English Ely lantern. The presence of the corner buttresses at Toro would indicate that the original intention was to roof it with a dome. Either courage or finances failed when the moment came, or perhaps some master eye realized that the composition was perfect as the mass then stood, and wisely carried it no further. It builds up wonderfully. If the term *monumentality* could be used in Romanesque, Toro could be said to have achieved it. To-day, stripped of its treasures inside and patched in the crudest manner outside, it is still a proud pile. Of several fine doors the west porch, with its original polychromy almost unscratched and delicately faded, is the best. One is thankful for these rare escapes from whitewash.

Passing again through the great junction of Medina del Campo we travel once more in Castile, to granite-gray Avila whose extraordinary situation on a flat-topped ridge in a desolate plain, as well as its wealth of ancient buildings, make it worth a visit. Its massive walls with nine gates and eighty-six towers are in perfect condition, and its Romanesque churches are among the finest in Spain. But we give no description of them here because they present no saliently Spanish features like the domes we have just seen in southern León or the galleries we are about to examine in Segovia. But for all that, Avila must by no chance be omitted by the traveler. Not only is its Romanesque particularly well preserved, but the town itself, and others on the same ancient road to Salamanca—Madrigal de las Altas Torres and Sepülveda—look like old monk-made pictures of places that must have ceased centuries ago to really exist.

Close to Avila in miles but far in actual railroad travel is Segovia. Many late Romanesque buildings remain since its days of greatness (in the Thirteenth Century) but it would seem almost presumptuous to mention these before the mighty Aqueduct, the largest piece of Roman work extant in Spain, with its hundred and twenty arches stalking over the valley east of the city, then the city itself, and ending at the Alcazar. The whole structure is built up of heavy blocks of granite without mortar or clamps, and if one arrived at 3 A. M. his rickety hotel bus would rumble under it in the cold morning twilight and the huge naked-limbed structure would impress him as something weird and unearthly.

Segovia, it will be remembered, is noted for developing the open-gallery. The best preserved example of this is San Martén in the heart of the city. Its gallery runs around three sides, north, south and west; under the western colonnade is a fine sculptured door of Twelfth Century work. The detail in the gallery is very delicate, and it is to be hoped it will escape the restoration that is afflicting the once fine tower and the rest of the church.

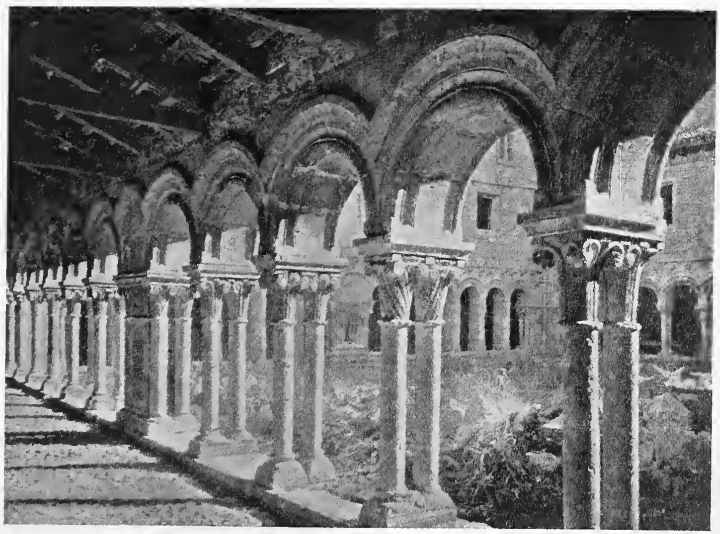
San Estéban nearby has also an exterior arcade on its west and south sides. Its magnificent steeple, the finest of its class, was struck by lightning in 1903, but is being slowly rebuilt. Another steeple, almost as fine, was once on San Juan de los Caballeros (the favorite church of Segovian noblemen) but only the lower part now remains. This church was further distinguished by the unusual feature of projecting transepts. In its apse, Daniel Zuluaga, uncle of the modern painter, has put up his kilns and makes beautiful glazed tiles; and in one of the transepts Ignace Zuluaga, the painter, has his summer studio and paints his two cousins, Daniel's daughters, whom we have all seen in many of his canvases.

Most complete of the Segovian churches, for many details besides its gallery, is San Millán in a suburb south of the great rock on which the city is perched. On north and south sides are round-arched galleries and within each gallery is a Romanesque door with richly

sculptured cornices and capitals. But the doors most accessible for the photographer—the example of over-whitewashing already complained of—is the simple well moulded one on the west front, with a round headed window above. San Millán long ago lost its original roof, which fact has given rise to much discussion as to what it may have been. Alternate columns and clustered piers separate nave and aisles, and as the clustered piers run up higher than the level from which the lantern springs, it seems improbable that the nave ever had a vault. Some say it had a cylindrical one, others a groined; but Señor Lampérez is in favor of a Moslem wooden roof, whose existence is indicated by the Moorish carved beams preserved in the sacristy. Further weight is given his argument by the fact that the lantern has coupled cross ribs leaving a cavity in the middle, which was the typical Moslem method of vaulting. If, then, Moorish workmen were employed for closing in the vault it is by no means unlikely that they built the entire roof. The deeply carved scenes on the interior columns, however, show no trace of Moorish.

Segovia further holds one of the most curious churches in Spain in its twelve-sided Templars' Church—La Vera Cruz. It bears the date 1208 as the year of its completion. Like other churches of the Knights Templar it is built in imitation of the Holy Sepulchre at Jerusalem, having in the centre a small walled chamber of two stories around which the nave runs, giving off three semicircular apses to the east. The nave is roofed with a round vault. The first story of the central chamber is roofed with a dome and the second with a Moslem vault like the lantern of San Millán, again indicating Mudejar or conquered Moorish carpenters. It is all good massive work and its two doors, south and west, are finely moulded and round arched.

There are at least half a dozen other Romanesque churches in Segovia, but they are in poor condition and present no remarkable features not already mentioned. The traveler who has time for further observations would do well to ride out on the daily stage to the royal residence at San Ildefonso and enjoy the curious sensation of seeing a wonderful French garden created in the very midst of the lofty Guadarrama mountains, before starting on the long barren journey across Aragon.



THE LITTLE CLOISTERS, BURGOS.



THE HEARST BUILDING,
CHICAGO, ILLINOIS.

Architectural Aberrations



The Hearst Building in Chicago



Some people say that the design of the skyscraper is settled, in all essentials, that it is established as a "type." Others as vehemently contend that what has been done hitherto in the design of tall buildings with metallic frames is provisional and tentative only, that there is nothing definitive about it. The "strict constructionist" cannot be pleased with a building that does not show its construction and exhibit its material. He will pooh-pooh the relevancy and validity of the current convention that the skyscraper should emulate the columnar division into base, shaft and capital. He has even been known to deny the postulate of the Father of Criticism that a work of art must have a beginning, a middle, and an end. There is another class of critics, who may be the same persons, who hold that the analogy of nature should be followed, not only in securing that decoration shall proceed from structure, but also in securing that structure shall proceed from function.

Perhaps the ultimate trouble with the commercial skyscraper is that, being by its magnitude, or at least by its altitude, a most conspicuous structure, it is yet devoted to the humblest and most prosaic purposes. Monumental by its dimensions, it is severely utilitarian by its requirements. There is no monumental idea expressed in it, or expressible by it. It consists of a series of cells in which the occupants do not properly live, but only, properly or improperly, get their livings. The only natural analogy to it is that of the honeycomb, where the "workers" at least sleep and feed, do something else, in fact, than make and store their honey. If the human workers did that, they would give more opportunity for specific and effective architectural expression. In other words, there is more of such opportunity in a skyscraping apartment-house than in a skyscraping office-building. There may be a difference between the apartments. There must be a difference between the rooms of the same apartment, according to their several purposes. These differences are architecturally expressible. But in the office-building the purpose of every subdivision is the same, and functional expression gives no scope for variety of treatment. The offices are all equal cells of the honeycomb.

It is true that the designer of the honeycomb, to wit, the busy bee, may detect and provide for differences of function. So he does when he lays out his combined apartment-house and office-building. The male bee, being a drone, or "clubman," and reduced to the sole functions of consumption and propagation, is accommodated accordingly. The female worker, analogous to the clubmans' wife who goes out sewing or takes in washing, is separately provided for in apiarian architecture, while the queen-bee has constructed for her a "royal cell." Here, you perceive, is a natural analogy for the case of an "institution" which builds primarily for its own accommodation but incidentally provides stowage for a swarm of "workers." In some cases this process seems to be reversed, and the structure to be erected primarily for the revenue derived from the workers, and only incidentally for the transaction of its own proper business. Such a building offers a chance for differentiation at which an architect ought to jump. His "institution," his "royal cells" would naturally be at the

bottom of the building or else at the top. Sometimes both, as in the case of a respectable newspaper-building, by which we do not necessarily mean the building of a respectable newspaper, though in this case it happens to be both, erected in St. Paul, Minnesota, some twenty years ago, that is after the advent of the elevator but before that of the steel frame, and thus limited to a modest twelve stories, of which the lowest is given to the counting-room, and the upper two to the editorial and typographical departments, the intermediate stories being available for rental. Here the Aristotelian demand fulfills itself without putting the architect under the necessity of making a factitious division, or even of hunting for a division, but only of recognizing a division that exists.

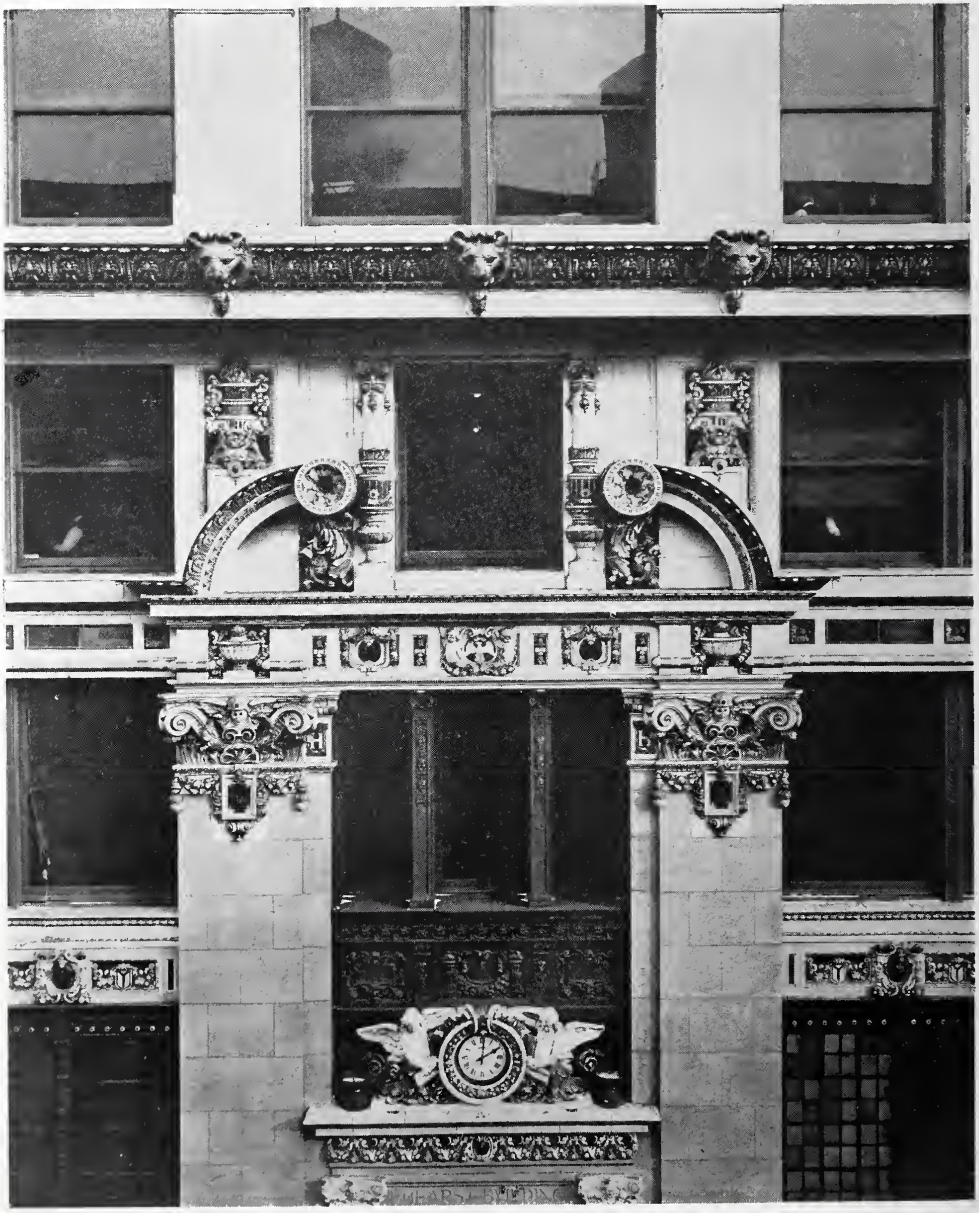
The "layout" of this building in St. Paul is, or might be, apparently, the layout of the Hearst Building in Chicago. But one looks in vain for any recognition on the part of the architect of the facts in the case. Looking at the building as a whole, it might be any sort or condition of a commercial building. It might be an office building, and then again it might be a department store. It is true that the Chicago convention of utilitarianism and practicality is followed in the disposition and the forms of the openings. That is now become almost a matter of course everywhere. Times are changed since a New York architect designed an office building consisting of tiers of two-story orders. The enclosure of two stories in one order seemed to the beholder to be a device for giving the building scale, but it appears it was a device for avoiding the presentation of the actual windows as squares or nearly so, which resulted from the construction, and for presenting them as the conventional oblong. It was an unworthy object and an ineffectual device, the proof being that the fenestration of the unregarded sides and back of the edifice in question, where the windows are left to assert themselves as squares, is more grateful to the view than the considered fronts, in which they are presented as "uprights" by an overlaid trellis of two-story orders. It is not on account of his square windows that we have to quarrel with the architect of the Chicago building. His fenestration shows another caprice, not as hurtful as that of the two-story trellis, but still injurious for the same reason, that it is a dissembling of the facts. This is the subdivision of the end windows on each front by mullions. The object of this device appears to be to make the ends look more solid than the intervals between them. In a building of masonry there is a mechanical reason for this thickening at the corners. In a framed building, whether the frame be of timber or of metal, it loses its meaning, and becomes mere convention. But that is not the worst of it. In obedience to the exigencies of show windows, the uprights are not only thinned to the minimum, at the bottom, and apparently deprived of the fireproofing envelope which is given to them up above, but they are withdrawn from the plane to which they are advanced above, so that the basement is the most attenuated and skeletonized portion of the entire structure. The upper part, it is true, is so far skeletonized that the contrast is not so ugly and ridiculous as where an apparent wall of massive masonry apparently stands on a sheet of plate glass, but it is glaring enough to give pain to the sensitive. And, as for the mullions that are introduced at the corners above the mezzanine floor, they suddenly cease above this floor, so that the corners are least massive of aspect precisely where the eye demands that they should be most massive, that is, at the bottom. Even that is not the worst of it, for they have no visible means of support, but merely stand upon the floor-beams and impend over voids, in a manner which would be mechanically impossible if they were of the masonry of which they purport to be. The convention that the structure is of masonry is abandoned. It is true that the building does not architecturally express itself as a frame building but only gives itself away as such, which is a very different matter.

A department store, one would say to look at the Hearst Building, and moreover a department store in which the

architect shows himself unable to reconcile the discrepancies arising from the conflict of the exigencies of construction and the exigencies of occupancy. That is what it would look like if it were left to itself. But in an evil hour the constructor undertook to be also a decorator. We have seen that his departures, in the interest of architectural expression, from the nakedness of his utilitarian scheme, instead of cloaking its nudity, added absurdity to it. Absurdity is also, unfortunately, the "note" of the decoration. Excepting at the top. The strict logicians have ceased to put cornices on their skyscrapers, seeing that the rainfall on the roofs is in fact discharged inwardly and not outwardly. Nevertheless, we may admit that a cornice, "in the present state of the art," "tolerari potest," if it be of moderate projection, and do not pretend to be a shelf projecting over and supported by a massive wall of the same material which does not exist. Also a parapet can be tolerated. It has a conceivable function in preventing the unwary from falling off the roof. The ornamentation of the present parapet is, abstractly, good, good in division, good in scale detail, and good in scale. But it is so rich and elaborate that it is in glaring contrast and contradiction of the wall underneath, which it makes to look balder than ever, while the baldness underneath makes itself look finical. It is a "purple patch" on a coat of frieze. Still, the decoration of the top, incongruous as it is, is by no means so bad as the decoration at the bottom, the lower three stories, the show-rooms of the department store. This section is decorated by a highly elaborate doorway at the centre of each of the visible fronts, by what we may by courtesy call colonnettes on the face of each of the upright posts and also on each of the mullions of the sub-



DETAIL OF THE HEARST BUILDING, CHICAGO, ILL.



ENTRANCE DETAIL—THE HEARST BUILDING, CHICAGO, ILLINOIS.



ENTRANCE DETAIL—THE HEARST BUILDING,
CHICAGO, ILLINOIS.

divisions of the bays at the corners to which we have already referred as standing on nothing. Much of the detail of this decoration is refined, some of it even "elegant." But it is all, by its profusion, even more open to the objection of incongruity that we have made against the parapet than is the parapet itself. It is open to a graver objection. We have admitted that the parapet conceivably had a function. But none of this has any conceivable function. It has absolutely nothing to do with the case. Not a bit of it is "decorated construction." Every bit of it is constructed decoration. The ornamental doorways are painfully squeezed in between the uprights, in a space evidently too narrow for them, and the uprights themselves are interrupted, in one case by crowning them, at the level of the mezzanine, with voluted capitals, in the other case with what may by courtesy be called corbels, projected to carry the projection of the entablature, projected "ad hoc." But the most absurd and irrational detail is that of what we have called the colonnettes incrusted upon the uprights. These make no pretense at all of being anything but "fancy" ornaments. A cylindrical mass is stuck on to the face of the wall, embellished with spirals, whittled away at the top and bottom to contradict the assumption in which nobody will concur that it means something, and finally, after it has died completely into the wall and one would say ceased, it crops out again, below the floor-line, into one of such niched corbels as are supposed to sustain the entablature over one of the doorways. No "architecture appliqué" could more ostentatiously advertise itself as having nothing to do with the case, as being irrelevant, incompetent and impertinent.

It remains to be added that he who sees the Hearst Building only in the photographs sees it to undue advantage. The charms of the incrusted decoration are in fact enhanced by color, by blues and greens and reds which rather aggravate than mitigate its excrescential character, and which also aggravate its inapplicability to the stark utilitarianism of the structure to which it is in fact applied. Whatever the solution of the problem of the commercial skyscraper may be, this treatment is not a step in the direction of such a solution. Most decidedly, this is not the way to do it.



CORNICE DETAIL—THE HEARST BUILDING, CHICAGO, ILLINOIS.

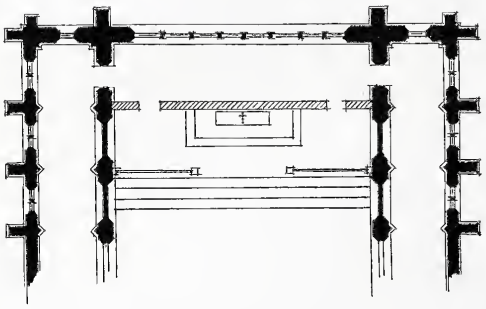
The Reredos of Christ Church Cathedral at St. Louis

By Guy Study

On Christmas Day the reredos in Christ Church Cathedral at St. Louis was unveiled. With an elaborate service conducted by Bishop Tuttle, the presiding bishop of the United States, this notable work of Christian Art was presented to the people of the Middle West. When we recall that scarcely more than a century ago the first settlers in the states west of the Mississippi were engaged in constructing their crude log-cabins and that, within fifty years from that time, we find a church of the proportions of Christ Church Cathedral, we may appreciate the determination and devotion of the builders of a generation ago. The plans for the Cathedral must have been drawn as early as 1858 for the church registry records at that date carefully prepared estimates of the cost. The foundations were completed by 1860 but the Civil War which divided not only the city of St. Louis but many of its congregations into two camps, prevented further work on the building for a period of four years. At the end of the war work was resumed in earnest; and by Christmas Day 1867 the church was so far completed that the first service was held in the nave. Although but partially completed, throughout these fifty years Christ Church Cathedral has stood architecturally the most important ecclesiastical edifice in St. Louis. It is only natural then, that to-day there should arise in the hearts of the children of the builders, a desire to complete the church, to add the flying buttresses, to continue the tower and to make the Cathedral a repository for memorials to their beloved dead.

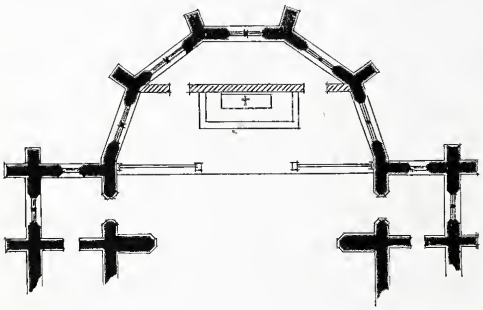
Although Christ Church Cathedral was built in the period of Victorian Gothic, we find none of the characteristics of that style. We find no frivolous detail, no diminutive, dry, metallic, motives, nor false ribs or vaulting of plaster. The details are carefully designed and well executed; every motive is logical and structural; splendid stone arches in the nave carry the clear story walls which in turn support the open timber roof construction. We may be surprised to find that the designer was Mr. Leopold Eidletz, a man not generally known as a master of Gothic. Unquestionably it is his best work; and of equal rank to the churches by Upjohn and Remwick. In plan Christ Church Cathedral has the form of a Latin cross, differing only from the typical English plan in its semi-circular sanctuary. A single corner tower is in course of construction. This whole tower from the sturdy base to the octagonal lantern at the top which recalls Rouen and Ely, fortunately has been given the same feeling of the original church, and reflects credit upon its designer, Mr. Caldwell.

The reredos is a screen of Caen stone; in plan it is that of the English reredos, built in a straight line from wall to wall of the semi-circular sanctuary. The English reredos was a development of the English plan. With the rectangular ending of the choir the logical and only architectural plan was to build the screen parallel to the wall behind. A condition presented itself in Christ Church Cathedral that offered no precedent to follow. The demand was to place a great canopied screen in a semi-circular sanctuary. Here was an opportunity for original and creative thought. We recall no such screen in England, nor in France. At Chartres screens were built between the piers of the apse; at Amboise we find the walls covered with canopied niches, and again in Merton Chapel, Oxford. Two modern solutions may be found in England, one at Marlborough College; and the other in St. Cuthbert Newcastle-on-Tyne. Unfortunately the opportunity was lost. The safe and tried form was accepted. That superb masterpiece of Gothic art at Winchester was taken bodily; changed slightly in proportion; changed in detail; improved we are bold



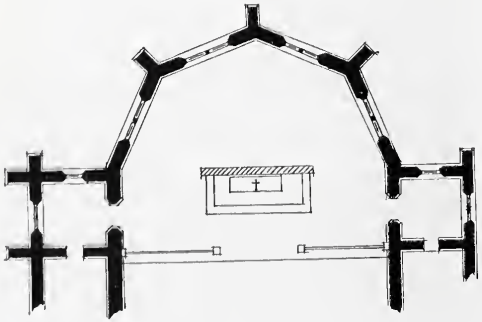
PLAN OF TYPICAL ENGLISH SANCTUARY
INDICATION OF REREDOS

enough to say, by substituting a relief representing the Nativity for the row of saints above the mensor; but in general mass, in composition and detail it is a replica of Winchester. The commission was intrusted to Mr. Harry Hems of

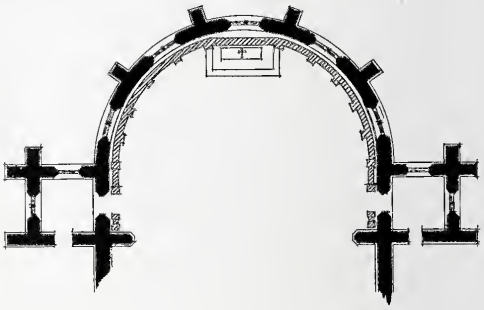


PLAN OF SANCTUARY OF CHRIST CHURCH CATHEDRAL
INDICATION OF REREDOS

Exeter, England, to carve a reredos similar to that of Winchester. And although this screen is a work of archæology rather than creative design, it cannot be denied that it is a wonderfully beautiful example of Gothic sculpture and decoration. We cannot hope, perhaps, to get in modern Gothic sculpture the naive charm of detail, the spirit of life throughout the whole, nor the deep religious feeling of the figures that we find in the work of the medieval carvers. Aided by a scant knowledge of human anatomy and a religious fervor marked by simplicity of faith the Gothic carver breathed into his work a spirit that has passed away. The relation in art of the figures on this reredos in Christ Church Cathedral to those at Winchester is that of Murillio to Fra Angelico; of Raphael's "Madonna della Sedia" to his "Madonna del Granduca." With an increase of knowledge the world lost faith; with increasing cleverness and skill the



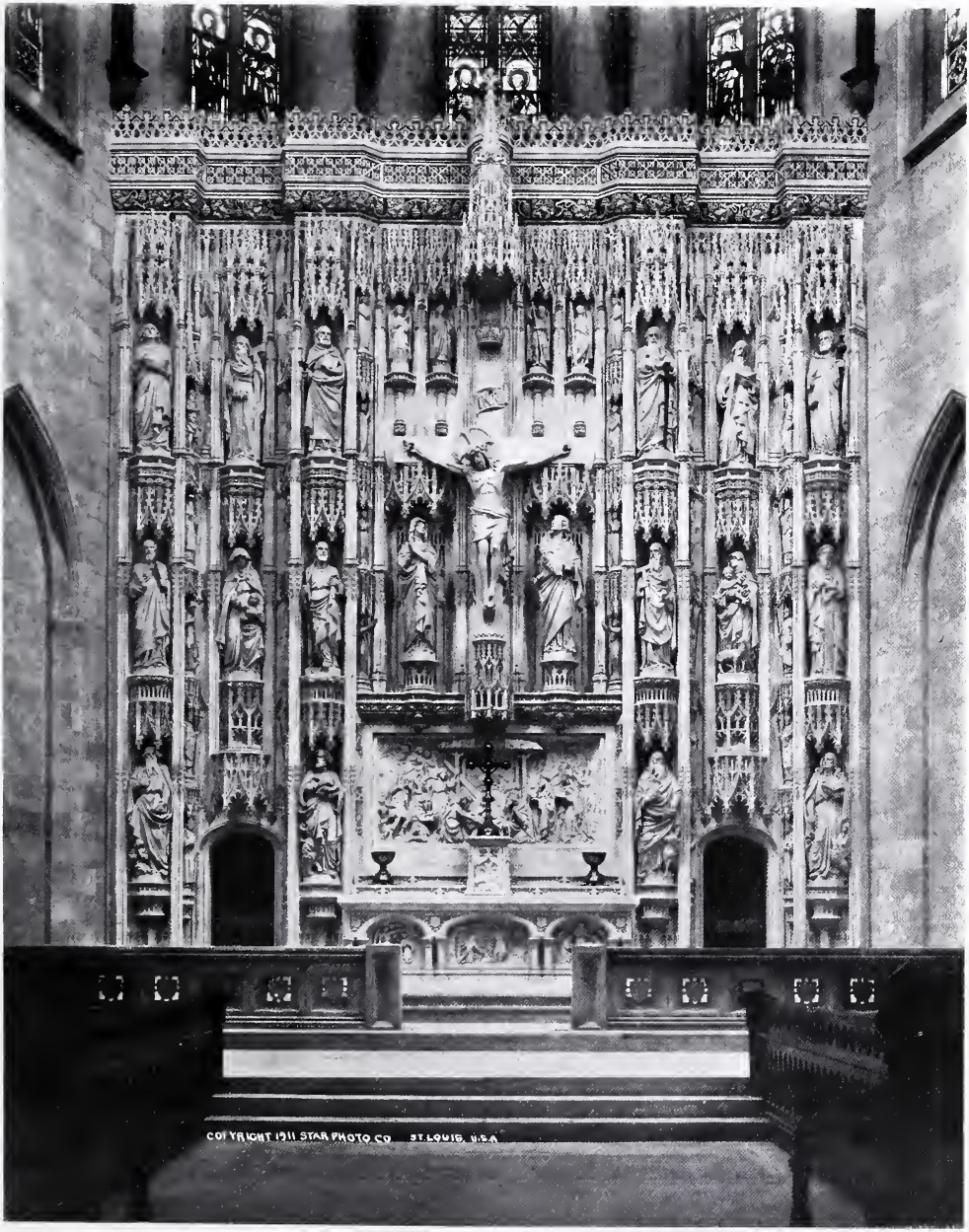
PLAN OF SANCTUARY OF MARLBOROUGH COLLEGE.
INDICATION OF REREDOS



PLAN OF SANCTUARY OF ST CUTHBERT NEWCASTLE-ON-TYNE
INDICATION OF REREDOS

unconscious power to express the lightest sentiment was lost.

While some of the feeling of the noble conception at Winchester may be lost, yet this screen is still the same great arabesque whose composition allows a play of light and shade, of rhythmical repetition of similar forms, of endless variety of detail, that no other art save Gothic permitted. It is a story written in stone; its theme is the glorification of Our Lord. The whole history of Christendom is told here; the story of the patriarchs and prophets, of the apostles, of the saints and martyrs, all leading up to the central figure of the crucified Christ. A work of this kind can not fail to have great influence for good upon a community. Already its impression is felt. Rather English must we consider it than American, since it was carved in detail in England and merely reconstructed here. To-day no doubt locally it is overestimated to a certain degree; but its position as a notable accomplishment of modern Gothic is assured.



THE REREDOS IN CHRIST CHURCH, CATHEDRAL, ST. LOUIS, MO.
Designed by Mr. Caldwell.



THE FIRST PRESBYTERIAN CHURCH,
SAG HARBOR, LONG ISLAND.

Early American Churches

Part V



Sag Harbor, L.I. - Meeting House, Springfield, N J. - King's Chapel, Boston, Mass. - St. Michael's Charlestown, S.C * * * *



By Aymar Embury II

FIRST PRESBYTERIAN CHURCH

Sag Harbor, L. I.

While this Sag Harbor church is of somewhat later date than most of the churches included in these articles, it seems to me worth while to include it as one of the few surviving monuments of our brief "Egyptian Revival," and the tower, really quite graceful in outline, is such an extraordinary addition to Egyptian architecture as well as a piece of design (if one can forget its curious characteristics) is as good or better than any present-day architect could do with the intractable style employed. The oldest church in Sag Harbor was built on the site of the present building in 1817, and was a small temporary structure. The congregation at once began to collect material for a new and larger building which was stored around the church, but the material and the old church were together destroyed by what is known in the village history as the "great fire." The present structure was built in 1843-1844 and no architect properly so-called was employed, but the design was a compromise between the efforts of four men employed on the building, of whom one, a Mr. Bellows, who is I believe still alive, was the builder in charge. The interior was altered from time to time, the material removed being stored in the basement of the church, but in 1910 it was replaced in its original position and the church as it now stands is as it was originally constructed, except that the tower is shingled in place of being clapboarded. The building is a very curious and interesting combination of Egyptian with decadent Greek motives, and has much the same character as we find in certain buildings of Pompeii which were of course totally unknown to its designers, and it is to an architect especially, a matter of interest to find in America in the middle of the nineteenth century a result similar to that in a Roman town of the first century produced through nearly the same causes; namely, the decadent combination of two foreign forms not thoroughly understood by the designers who employed them. This curiosity is worthy of notice.

MEETING HOUSE,

Springfield, N. J.

The present building is about as nearly a typical example of the country meeting house of late Colonial times as could well be imagined. Other than the tower there is nothing to distinguish it as far as the exterior goes, from a building used for any other purpose, but even these excessively plain and absolutely unornamented buildings of the eighteenth century were possessed of considerable charm of appearance because of their excellent mass and delightful detail of cornices, and the feeling of scale due to the distribution and division of the window openings. The original church at Springfield was built in 1761 and was burned on June 20th, 1780, at the time when the battle or skirmish of Springfield was fought. It had been previously used by the Colonial government as a storehouse for supplies for the Continental army, and at that time services were held in the parsonage or its barn. The present structure was rebuilt, as I understand it, as a

duplicate of the preceding one, and was opened for worship on November 30th, 1791. The exterior is of hand-rived cypress shingles, and as was the case with all buildings built at that comparatively early date, the iron work, nails, etc., were all hand made. The statue of a Continental soldier is in memory of the skirmish fought there. During this skirmish the church was held by the Continental soldiers and attacked by the British, while Parson Caldwell of the church, although not actively engaged in the fight, tore up the hymn books and threw them to the soldiers for wadding, calling out as he did so, "Give them Watts, boys, put Watts into them."

The interior has had the old Colonial columns replaced with small cast-iron ones, which with the decoration of the interior was probably done about 1880-1885, during that period of remarkable taste to which we owe so much of the curious stencil work that ornaments some or our renovated or refurbished Colonial churches.

KING'S CHAPEL

Boston, Mass.

KING'S CHAPEL is the first edifice of the Protestant Episcopal Church in New England and its construction was due, as was so often the case in the earlier Episcopal churches, not to any organized local sentiment on the part of the inhabitants, but to direct governmental interposition. The parish was organized in May 15th, 1686, when the British government sent an established minister of the Church of England to Boston, together with members of a commission appointed by King James Second to preside over the church in the colonies. These gentlemen asked permission of the three congregations then owning the only houses of worship in Boston to use one of their churches for service; this request was met with a curt refusal. Services were finally held in a large room of the Town House until Governor Andros ordered the trustees of South Church to open their building for Episcopal services, which was first held in South Church, May 4th, Good Friday of that year. A small chapel was soon afterward built for the Episcopal congregation in 1690. This was enlarged in 1710 and was rebuilt in 1749. The design was probably made by a Mr. Harrison of Rhode Island, an architectural amateur whom we find to have been consulted with regard to other early churches, and as the church history states, "Mr. Harrison of Rhode Island, a gentlemen of good judgment in architecture, was asked to oblige the parish with a drawing of a handsome church agreeable to the limits set forth." The drawings are now lost and it is not known whether they were closely followed or not, but as we do know that the congregation was well pleased with the drawings submitted by him, it is reasonable to suppose that they were followed as closely as possible, with the exception of a spire which was contemplated by the designer and which was not carried out. Its cost was £2,500, a very moderate sum for a cut-stone building; this, however, did not include the colonnade which was added in 1790. As was the case with many of the early Episcopal edifices the English sovereign appeared to take a personal interest in the parish; King James the Second presented the bible, which is still in use, together with a valuable communion service. Queen Anne sent a red damask cushion for the pulpit, surplices for the rector and choir, and the linen for the altar. The interior was decorated with panels, escutcheons and coats-of-arms of the English King and prominent members of the congregation, which decoration of a church edifice rendered it excessively unpleasing to the Puritans of Boston, who protested vigorously but without avail. The organ still used in the church services was purchased in Europe by subscription and is said to have been selected by Handel, and was installed in 1756. King George the Third presented the pulpit at present used, as well as more communion silver, and in Pre-Revolutionary times the church was the usual place of worship for the royal governor's



INTERIOR OF THE FIRST PRESBYTERIAN CHURCH,
SAG HARBOR, LONG ISLAND.



INTERIOR OF ST. MICHAEL'S CHURCH,
CHARLESTON, SOUTH CAROLINA.



ST. MICHAEL'S CHURCH,
CHARLESTON, SOUTH CAROLINA.



INTERIOR OF KING'S CHAPEL,
BOSTON, MASSACHUSETTS.



EXTERIOR OF KING'S CHAPEL,
BOSTON, MASSACHUSETTS.

household and the officers of the British troops stationed in Boston. The difference which opinion had undergone in regard to an Episcopal church in Boston, was made manifest at the conclusion of the Revolutionary War, when the members of Old South Church, who a hundred years before had only permitted the Episcopal congregation to use their building at the direct order of the governor, now offered the congregation of King's Chapel the use of their building until their own had been restored, which was necessary because of damage done by the British forces during the Revolution. The church as it stands to-day both in interior and exterior, has remained practically unchanged since 1790 and in most respects is in its original condition.

ST. MICHAEL'S

Charleston, S. C.

St. Michael's was at the time of its construction the finest church edifice in the United States, and was one of the very few entirely of masonry construction, including the tower as far as the belfry. The material is brick covered with stucco, and the design, although perhaps a trifle heavy, is most excellent. The name of the architect is a matter of some question; the only evidence which I have been able to obtain on the subject being that the designs were made in England and brought to this country. The South Carolina Gazette of February 22, 1752, informs its readers that the church was to be erected from the designs of one Mr. James Gibson. As there is no memory of any English architect by this name, and as James Gibbs was then at the height of his reputation, it seems a not illogical assumption that James Gibbs was the architect. The building is one hundred and thirty feet long, including the portico, and sixty feet wide, while the tower is one hundred and sixty-eight feet high. The roof is of slate. The steeple is surmounted by a gilt ball of black cypress covered with copper, and when this ball was blown from the steeple during a severe storm, it made a dent in a heavy flagstone pavement without injury to the ball, which was picked up and restored to its original position. As was the case with King's Chapel the corner stone was laid by the Governor of the State in February 17, 1752, three years later than the New England Church. The church was first opened for services in February 16, 1761, nine years having been consumed in its erection, and the selection of a satisfactory pastor. The clock and chimes were bought in 1764 and the chimes are of very notable excellence. The communion service was given to the church by Governor Boone of South Carolina, and the church organ was bought by subscription in 1768. Like almost all the Colonial churches, this one suffered vicissitudes during the Revolutionary War; its rector was a Tory and was compelled to resign, leaving the church affairs in a somewhat chaotic condition. Materially it suffered through the loss of its leaden roof, which was removed to furnish bullets for the Colonial rifles. During the Civil War the church was several times struck by shells from the Union fleet, and as a precautionary measure the organ and chimes were removed from the church and the fine old bells were broken up by Sherman's army in its march to the sea. After a while they were reset and still remain in their original position. Another incident of the church's history was made the subject of a poem which thirty years ago used to be a favorite for school speaking contests. The spire caught fire nearly at its summit, and was finally extinguished by a slave, to whom freedom was granted as a reward for his daring.

As if two wars and a fire had not done the church sufficient harm, a cyclone in 1885 wrecked the spire and damaged the roof; while in August 31, 1886, the great earthquake cracked the walls in many places, sank the spire eight inches and tilted it out of perpendicular; $15,000 was necessary to repair the damage done by this earthquake, but to-day this historic church stands apparently as firmly as when it was originally constructed and it is in all material respects practically in its original condition.



CHURCH AT SPRINGFIELD, NEW JERSEY.



INTERIOR OF CHURCH AT SPRINGFIELD, NEW JERSEY.

An Architectural Pioneer



Review of the Portfolios containing the works of Frank Lloyd Wright.



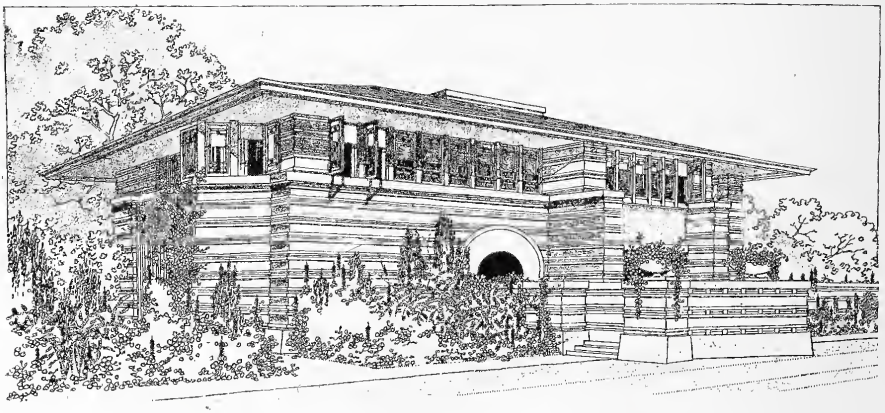
By Montgomery Schuyler

Such works of Frank Lloyd Wright as he thinks worth preserving in pictorial presentation, and as probably profitable for doctrine, for reproof, for correction, for instruction in righteousness, have just been issued in two large and handsome portfolios, from the press of Ernst Warmuth in Berlin. The mechanical work does the greatest credit to German printing and engraving, or "processing," as the case may be. Quality as well as price is concerned in the transfer to the press of Berlin from that of London or Paris of "monographs" of this character. And indeed there is good reason for taking an appeal to the German public upon such questions as are raised by the plates and dealt with in the twenty pages or so of text, which is printed in German as well as in English. At present Germany is more hospitable to new artistic ideas, at least to ideas which pertain to architecture and decoration, than either France or England. You may maintain the French to be the most artistic of the three peoples and artistically the most open-minded, the readiest to consider novelties on their merits without being repelled by their strangeness, rather prepared, in fact, in the presence of a novelty to "as a stranger give it welcome" (the split infinitive is Shakespeare's fault and not ours). Still, one has to recognize the tremendous pressure upon French practitioners, if not upon French lay critics, of the "official style." Richardson used to tell how, going back to Paris after twenty years, he found his old fellow-students of the Beaux Arts expressing envy of him as being free to design public buildings in Romanesque, while they were confined to classic on penalty of abandoning all hope of a professional future. Out of France there is no such compulsion, except in America, where the Beaux Artists are vigorously at work to bring it about, and succeeding to a discouraging extent. As a matter of fact, the present architectural output of Germany offers more examples of what may be called organic development as the proper purpose of architectural design than that of any other country. As Mr. Wright has it, in his elucidative text:—"German and Austrian art-schools are getting back to these ideas." Accordingly, it is to the German and Austrian artistic public that the natural appeal lies.

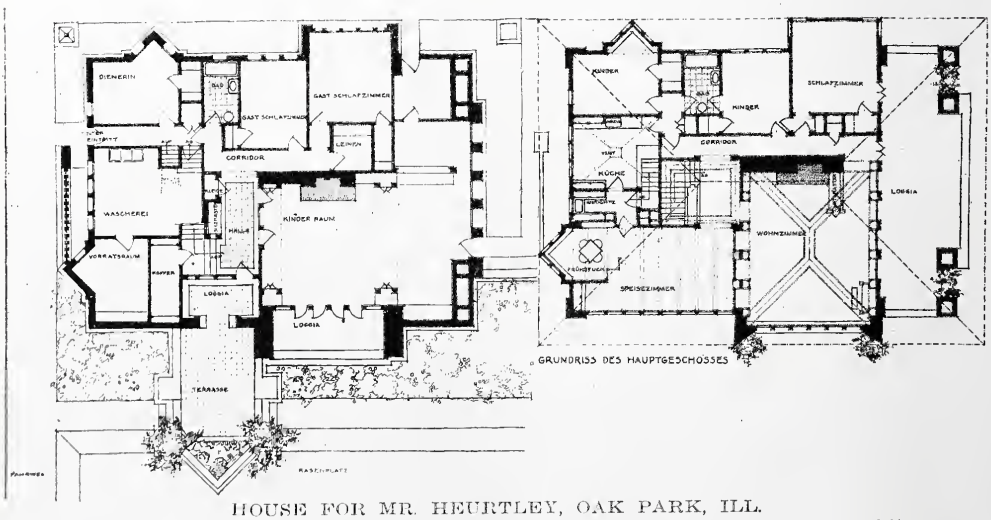
Mr. Wright's text is by no means negligible. "These ideas" are of course not new. They furnished the basis of architectural design for all Europe, with some exceptions in the architecture of Imperial Rome, up to almost the end of the fifteenth century. They furnish the basis of such design now to all countries outside the influence of European civilization. In all such countries the building is directly expressive of the needs, habits and ideas of the people for whom it is made, and of the materials and modes of construction at their command. Whether it be exquisitely and artistically expressive is a question the answer to which depends upon the degree of artistic sensibility in the people for which it is built and in the designer of the building immediately in question. But these architectures, or modes of building, are all alike "sound" in that they take their basis and starting point in the facts of the case, and strive to express those as perfectly as may be. One of our current buildings, of which the architecture disappears as soon as

you begin to put to it pertinent and rational questions, is entirely the product of the modern architecture of the schools. "These ideas" are so far from being new that they are the ideas of all mankind, excepting those of the builders of what Professor Freeman calls "The Imperial or Transitional Roman," and of crushed to earth, will rise again," or that if you expel Nature with a fork, yet she will return; for they are founded on Truth and Nature. Truth and Nature are two things that are never out of date, nor very long out of fashion.

Unhappily, the revolts that have been made, local and partial as they have been,



Prospective.



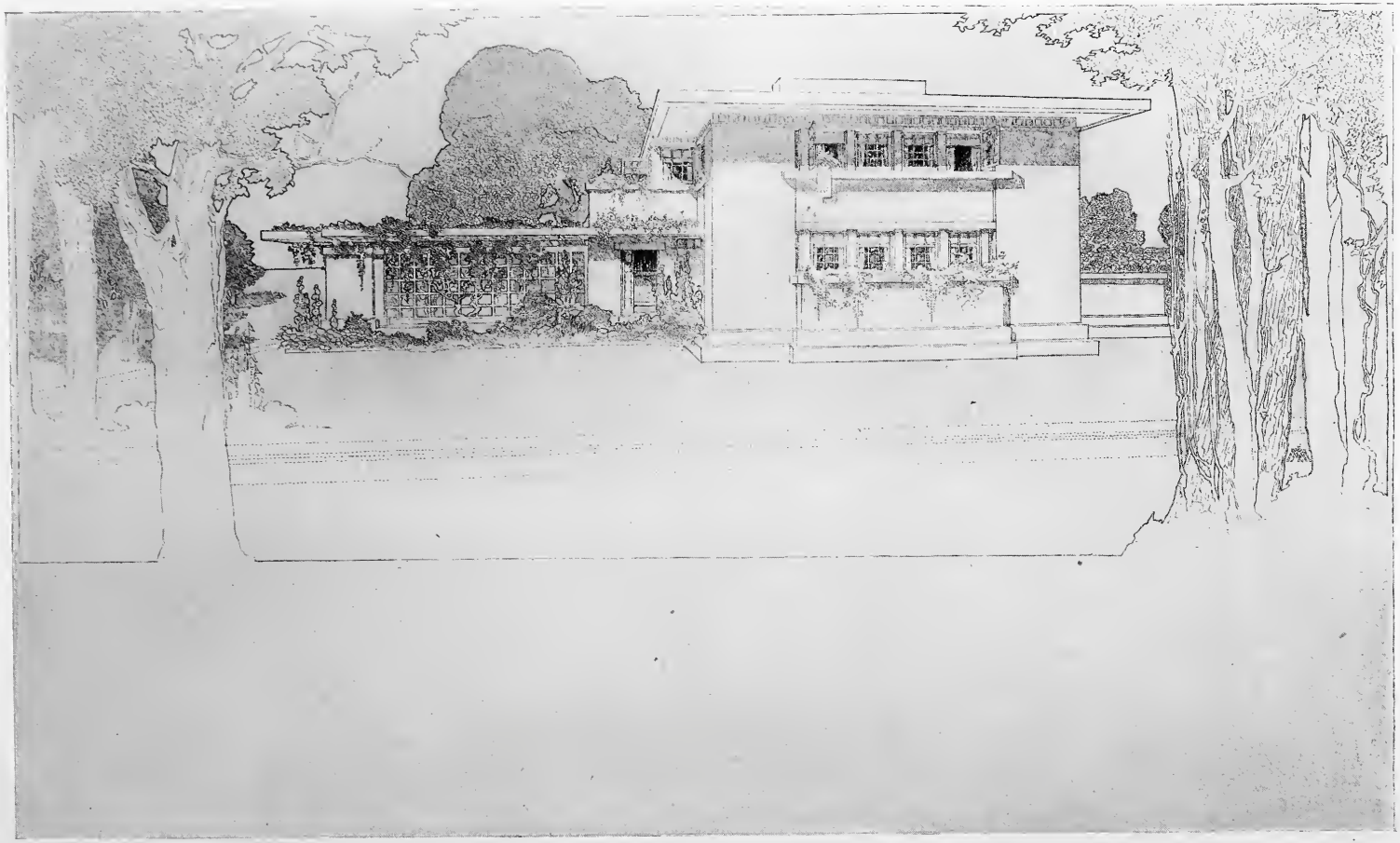
HOUSE FOR MR. HEURTLEY, OAK PARK, ILL.
Frank Lloyd Wright, Architect.

the revivers of that mode of building in the fourteenth century in Italy and of their disciples and imitators in Western Europe ever since. During these periods and in these regions, the idea underlying all real architecture have simply lapsed and been submerged. That they will reappear is as certain as that "Truth, against the "monstrous regiment" of the Imperial Roman architecture which wa brought in by the revival of the Imperial Roman literature, have themselves been largely vitiated because they, too, were "working in styles." Style for style, Gothic is preferable to classic, the classic of Greece even uncorrupted by Rome, on

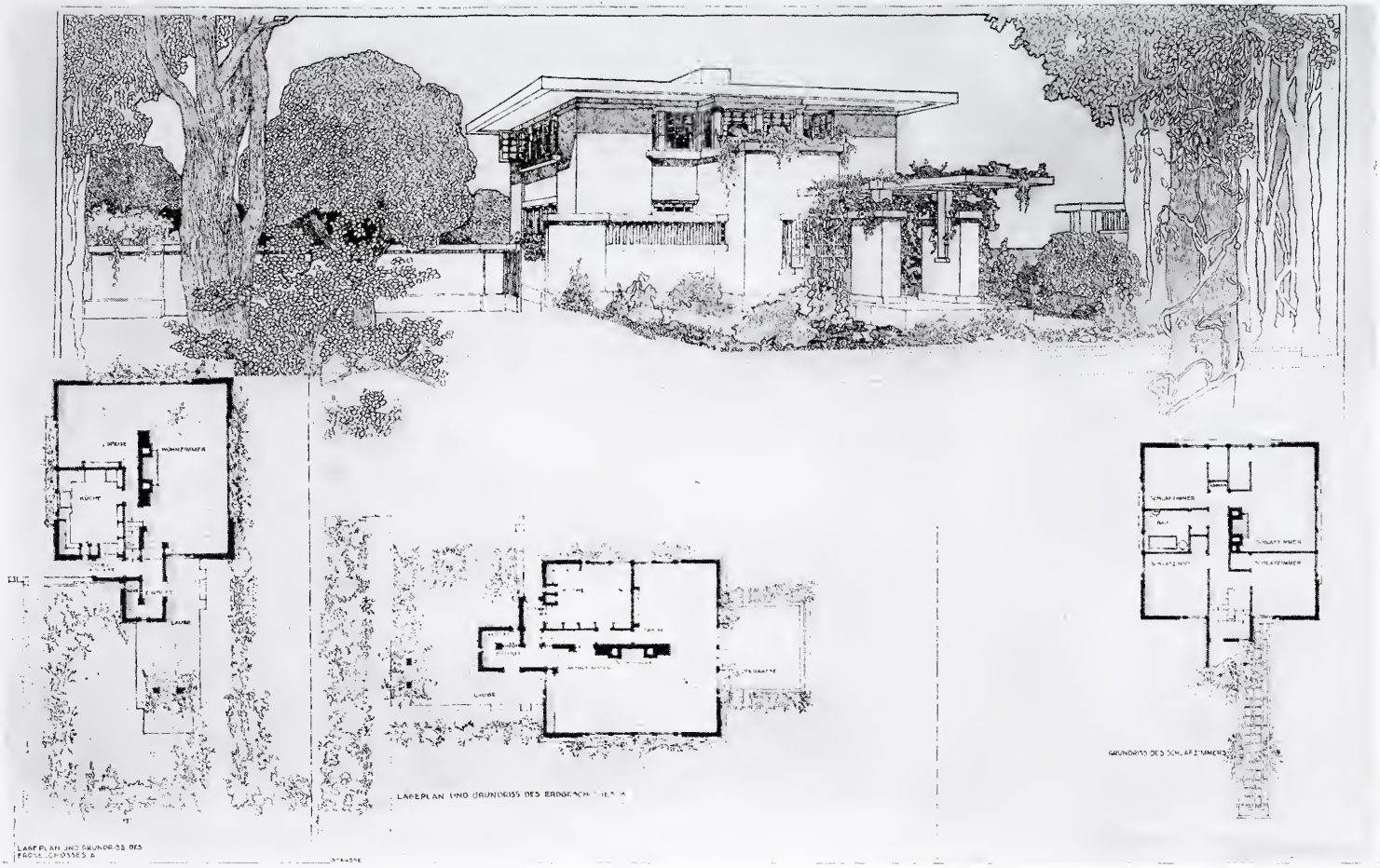
account of its greater flexibility, its dealing with a greater variety of modern problems, and its immensely greater repertory of adaptable forms. If you want a Catholic or a Ritualistic cathedral, you cannot do better than to take an extant cathedral of the middle ages as your model. If you want a temple of which the public use is to make processions around it under shelter of a portico which procession may be represented in sculpture at the top of the wall, and a solid core of building within the portico which has no public use, by all means you should take a Greek temple for your model. But as of course you don't, why, of course, you shouldn't. The range and variety of the constructions of the Middle Ages, the number of the mechanical principles which they apply and embody, are of course out of comparison beyond those of Greek antiquity, which merely carries to the utmost pitch of refinement a single and simple construction. But parroting forms, whether antique or mediæval, is not architecture. Working in styles is not architecture. One has often thought what a great thing it would be for the art of architecture if the student, after he has got his good in culture and refined perception out of the antique or the mediæval models, should be able to use them instead of copying them, should, in fact, treat them as a scholar treats the classical models in literature, to refine and enrich his own compositions in the vernacular. What a blessing, in fact, if not only all the engravings and photographs of historical architecture could be removed from an architect when he sat down to design anything, but all memory of the forms they record could be erased from the tablets of his brain!

Something like this line of thought seems to underlie the architectural efforts of Mr. Wright. Our characteristic buildings, our skyscrapers, say, express us. There is nothing like them in Europe. But they express us in spite of themselves. Viollet-le Duc theorizes that in the bastard architecture of the Roman Empire, the only classic, be it noted, that the architects of the Italian Renaissance knew anything about, since the Greek primitives of which the Roman buildings were derivatives were not accessible in Western Europe until the middle of the eighteenth century, the Roman engineer planned and built, and the Greek artist was imported to decorate. Just as when, in the sixteenth century, French monarchs undertook to uproot the native Gothic, French builders continued to erect Gothic châteaux which their employers imported Italian "potters," as Viollet-le Duc calls them, to decorate superficially. Similarly, our skyscrapers are as Mr. Wright says: "New York is a tribute to the Beaux Arts so far as surface decoration goes, and underneath a tribute to the American engineer." You must say the same thing of it that you must say of "the classical or transitional Roman," of the Italian revival thereof, of the Italianized French Gothic châteaux. It is inorganic. It is not architecture.

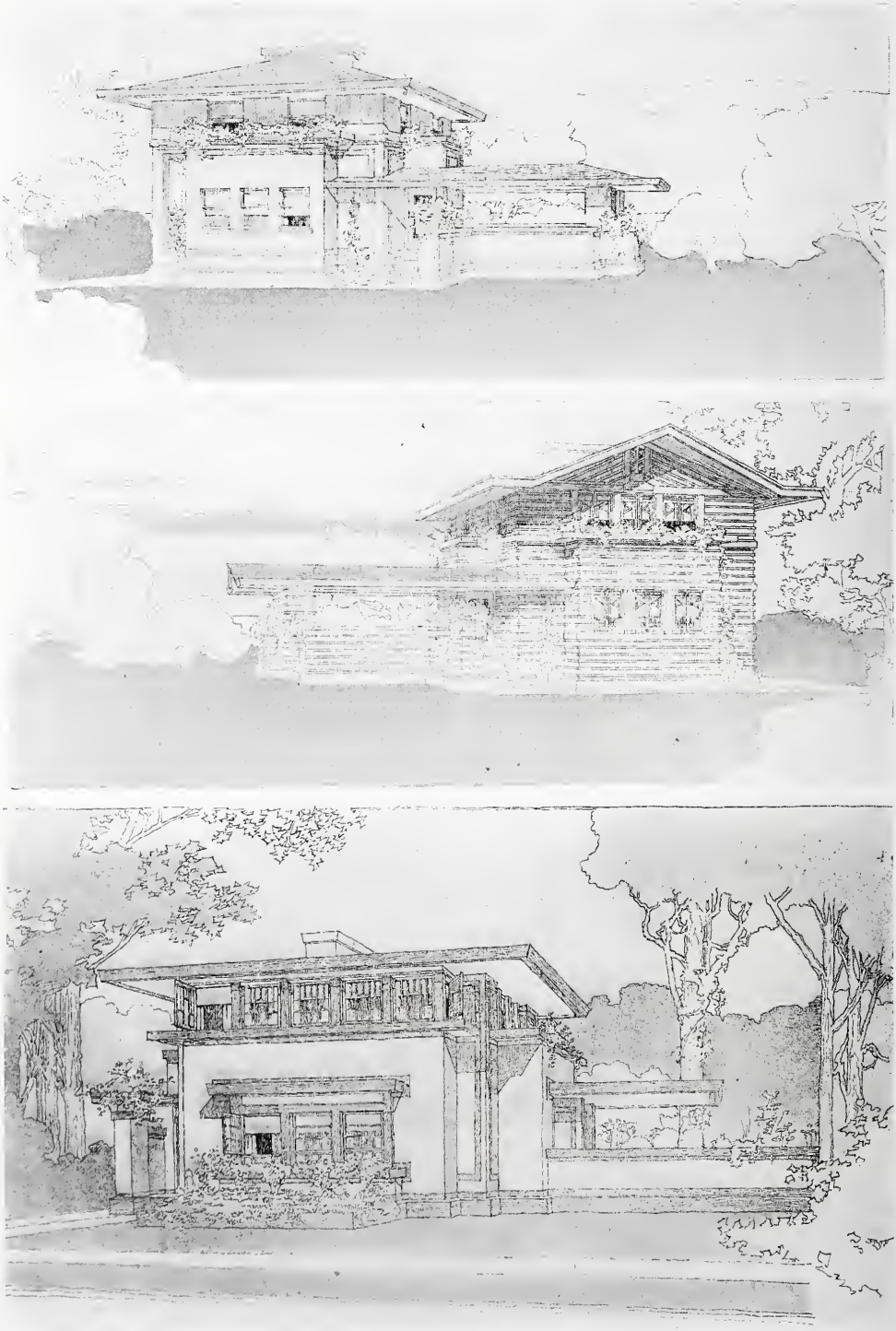
Now when an architect, intensely feeling this contradiction and this absurdity, undertakes to reconcile and rationalize the conflicting elements, or rather ingredients, of current architecture, he is entitled to every allowance as well as to every encouragement. He is a pioneer, and the utterance of a pioneer, as a poetical pioneer has told us, is liable to fall upon unaccustomed ears as a "barbaric yawp." But what all the designs illustrated in these two portfolios show is an attempt at the organic, an attempt to organize the requirements of the given building into a whole made up of related and interdependent parts, to find the seed, so to say, in order to grow the flower. It is not necessary to illustrate. Enough of Mr. Wright's designs have been shown in these pages to show whoever has considered them attentively what we mean. Every one of them, whatever else may be said about it, is a growth and not a compilation. Every one of them shows that power of simplification and unification which was the essential gift of Richardson, and which was quite independent of his fondness for Romanesque detail, for exaggerated voussoirs and dwarfed columns. The simplicity of the ground plan is always noticeable. Mr. Ashbee calls it "noble" and we will not quarrel with his adjec-



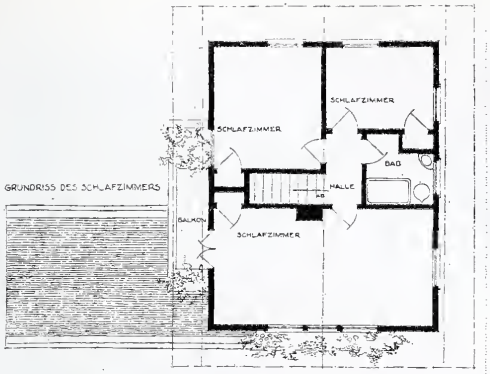
PERSPECTIVE OF HOUSE FOR "THE LADIES' HOME JOURNAL." FRANK LLOYD WRIGHT, ARCHITECT.



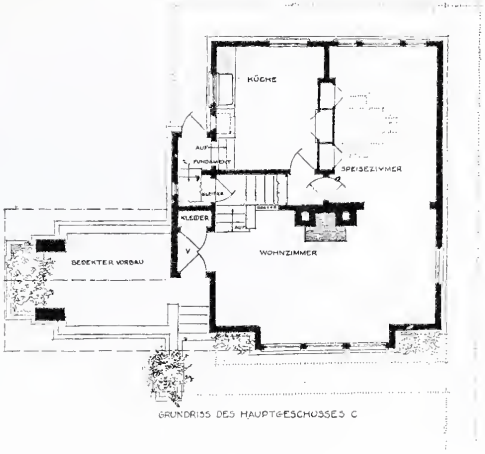
PERSPECTIVE OF HOUSE FOR "THE LADIES' HOME JOURNAL." FRANK LLOYD WRIGHT, ARCHITECT



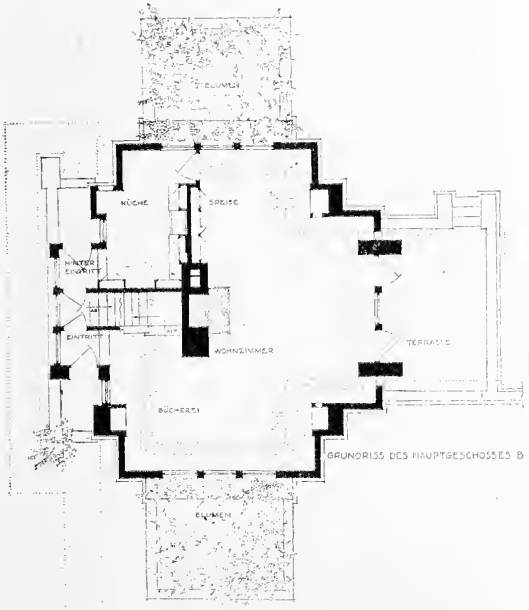
HOUSES FOR E. C. WALLER, ESQ., RIVER FOREST, ILL.



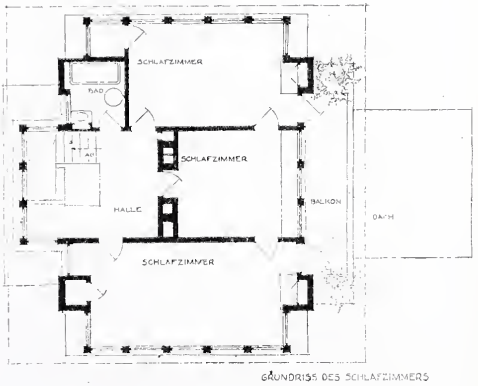
GRUNDRISS DES SCHLAFZIMMERS



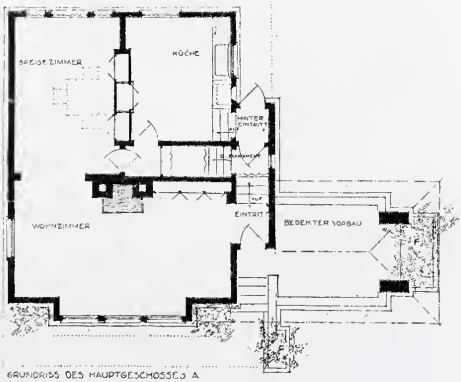
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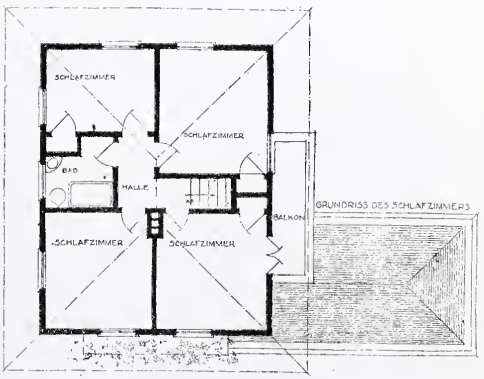
GRUNDRISS DES HAUPTGESCHOSSES B



GRUNDRISS DES SCHLAFZIMMERS

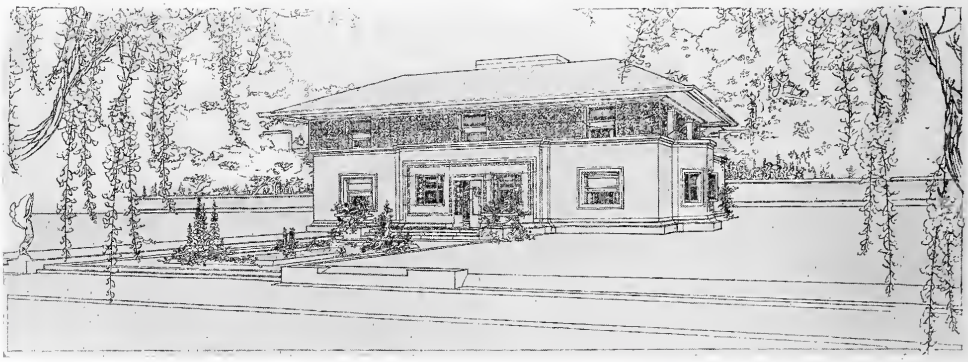


GRUNDRISS DES HAUPTGESCHOSSES A



GRUNDRISS DES SCHLAFZIMMERS

HOUSES FOR E. C. WALLER, ESQ., RIVER FOREST, ILL.

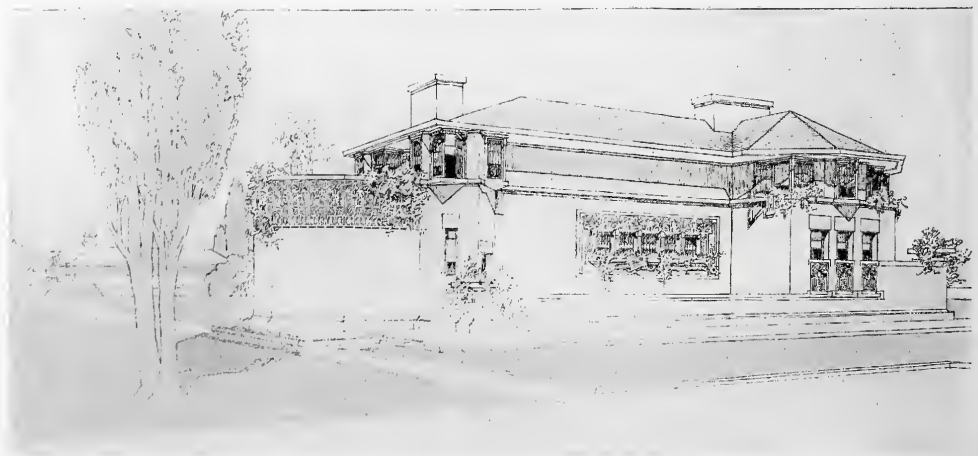


THE WINSLOW HOUSE AT RIVER FOREST, ILL.
Frank Lloyd Wright, Architect.

tive. The prevailing horizontality Mr. Wright claims to be especially "domestic." For that matter, it happens to be quite in accordance with the current fashion in domestic architecture, in works which have nothing else in common with these. It may also have, as he further maintains, some special congruity with what Lowell describes as

> Broad prairie rather, genial, level-lined,
> Fruitful and friendly for all human kind;
> Yet also nigh to heaven and loved of loftiest stars.

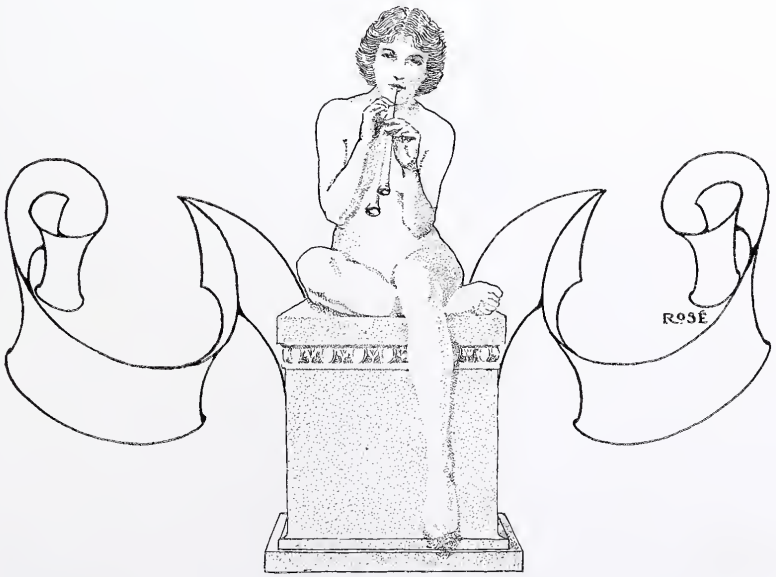
The horizontality of the Egyptian temples has similarly been ascribed to the level sands of the desert, and perhaps, in either case, the uneventful expanse may have something to do with the character of the architecture, though Mr. Wright will pardon us if we do not wholly follow him in what he will not mind our calling his Rhapsodie Prairiale. In times and countries in which architecture is a living art, the general form of building corresponds to the environment, and the bristling pyramid of the Abbey of Mont St. Michel would be as impossible in the midst of the Roman Campagna or of an Illinois prairie as the spreading expanse of the temple of Karnak on the spike of the Mont itself. Fitness is part of the dignity of these elevations, which in the best examples is undoubtedly great. But what makes the real impressiveness of these designs is that they are organic wholes, that the variety of their parts, without being denied or slurred, is overruled into an effective unity, that they are not compiled out of picturesque "bits" which have caught the eye of the

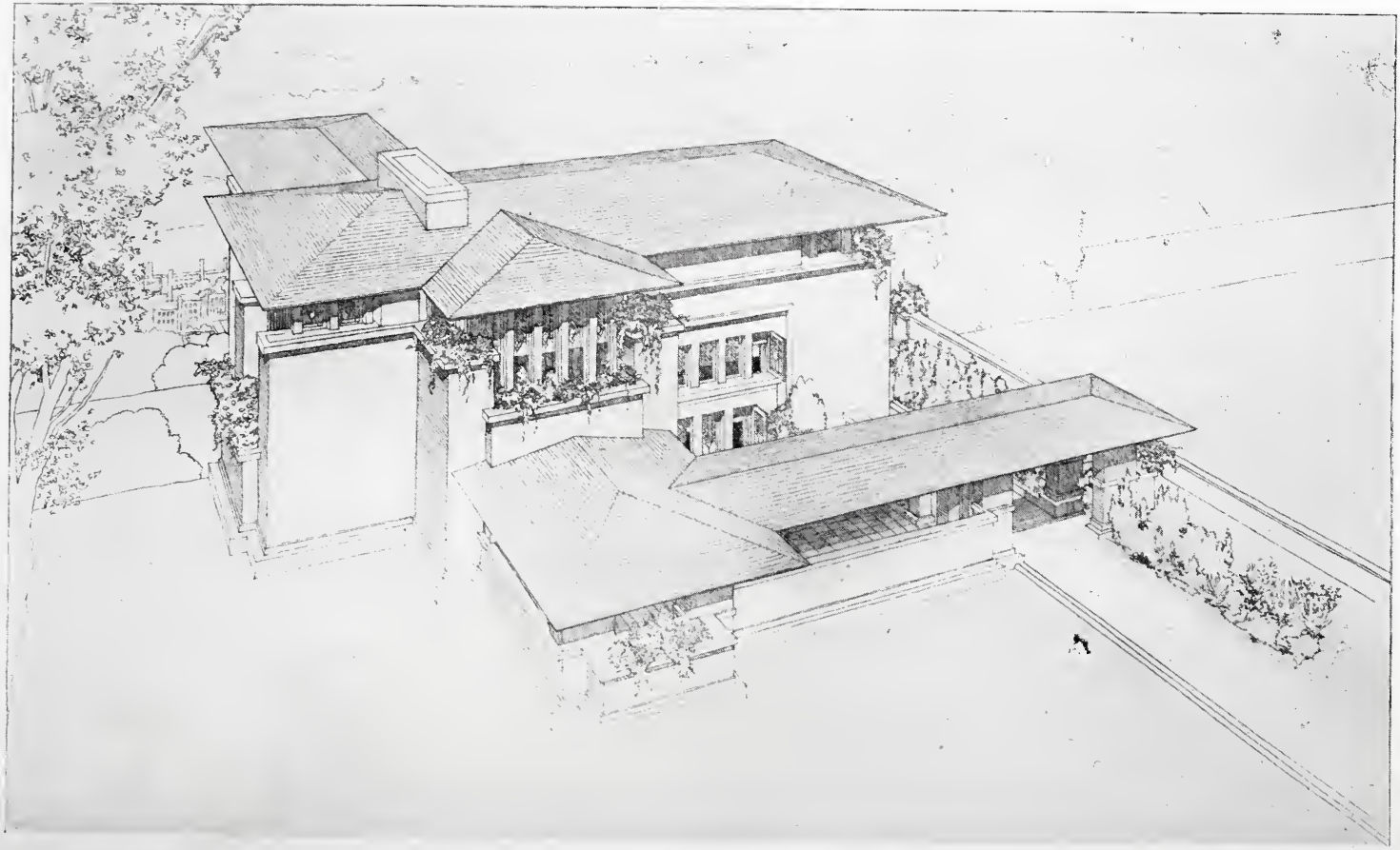


THE McAFEE HOUSE IN CHICAGO, ILL.
Frank Lloyd Wright, Architect.

designer in a rapid tour, or in a still more rapid rummage through a pile of photographs.

The defect of their quality will be evident to every practiced inspector. Those functional modifications of surface or of line, commonly by means of mouldings, to form a footing, to emphasize a division, to soften or to sharpen a transition, to mark a projection or a recess, which have been employed in every artistic mode of building from the Egyptian downward, are here almost altogether absent, nor can their place be supplied, as to the artistic result, by decoration strictly and properly so called. The defect of the architecture is the same as the defect of the "Mission" furniture, which it appears that the architect commonly, and properly, specifies to go with it. The stark unmodelled transitions give an air of something rude, incomplete, unfinished. The buildings seem "blocked out," and awaiting completion rather than completed. The lack is nothing at all against the theory of design in the author's mind, nothing against the reduction of the theory to practice so far as it has gone. It is a deficiency which belongs to an art in its lusty youth rather than in its decadence, and indeed we can find it in the early Romanesque, which was a living style if ever there was one, in comparison with its own later phase, and still more in comparison with the developed Gothic. Moreover, it is a deficiency which can be supplied and will be supplied, when it is once recognized that the mode of design to which it is not a necessary drawback has "the promise and potency of life." A pioneer must have patience and so indeed must those who believe in him. He should be willing to say with Bacon: "I could not be true and constant to this argument I handle if I were not willing to go beyond others, yet not more willing than to have others go beyond me." Meanwhile, it is hard to see how an unprejudiced inquirer can deny that such designers as Mr. Sullivan and Mr. Wright have the root of the matter, and that their works are of good hope, in contrast with the rehandling and rehashing of admired historical forms in which there is no future nor any possibility of progress.





THE DWELLING OF MR. CLARK,
PEORIA, ILLINOIS.


PORTFOLIO
OF
CVRRENT
ARCHITECTVRE



THE DESIGN OF A SMALL HOUSE WITH MANY INTERESTING FEATURES, GARDEN CITY, LONG ISLAND.



AN EXAMPLE OF THE AMERICAN FARM-HOUSE TYPE AT GARDEN CITY, LONG ISLAND.



A VERY SMALL HOUSE WHICH DEMONSTRATES
THAT IT CAN BE GOOD ARCHITECTURALLY.



AN EXCELLENT EXAMPLE OF SIMPLICITY IN THE WALL TREATMENT OF PLASTER HOUSES, GARDEN CITY, LONG ISLAND OSWALD HERRING, ARCHITECT.



THE REAR OR GARDEN ELEVATION OF THE RESIDENCE OF TIMOTHY WOODRUFF, ESQ., GARDEN CITY, LONG ISLAND, AUGUSTUS N. ALLEN, ARCHITECT.



THE FRONT ELEVATION OF THE RESIDENCE OF TIMOTHY WOODRUFF, ESQ., GARDEN CITY, LONG ISLAND, AUGUSTUS N. ALLEN, ARCHITECT.



KENNELLY'S RESTAURANT BUILDING, NEW YORK CITY.
J. HARRY O'BRIEN, ARCHITECT.



PICTURESQUE CHEAP HOUSES.

In the recent cutting up of Gidea Park—an historic estate on the outskirts of London—into a residential suburb, there was tried an architectural experiment of considerable interest. After the streets had been planned—and the undertaking was purely commercial, not philanthropic—the owner offered to architects a series of prizes for the "best" houses, the prizes being graded according to the cost and accommodation of the dwellings. C ass I. included detached houses to cost £500, the first prize being a gold medal and £250, and the second prize £100. Class II. was for a detached house to cost £375, the first prize for this being a gold medal and £200, and the second prize again £100. Class III. was for the house of Class I. or II. which had the most convenient interior arrangement; and then there were additional prizes for a garden design, for furnishings, etc. Altogether, about 120 architects came forward to take sites and erect houses, not, we may suppose on the chance alone of obtaining a prize, but on the inducement of having their work so well exhibited and with the probability of eventually effecting a sale. Probably, also, most of the competitors were financed by builders, who took the actual risks. When the six score houses had been completed, there was held an Exhibition, opened by the Honorable John Burns himself, and thereafter while it lasted a special train was run every day from London that the results of the competition might be studied. Further to advertise the project, a book was published about it, with articles by such men as Arnold Bennett, Thomas Hardy, H. G. Wells, Sir Arthur Pinero, etc.—men whose writings usually command public attention, even if one would not naturally go to them for advice about a house. Professor Adshead, in describing his impressions of the exhibition, in an article in "The Town Planning Review," notes the collection as one representing the latest tendencies of English domestic architecture. He finds that to bring together a street of competitive cottages, even though individually a high level of architectural merit be attained, produces an effect which, "if not exactly 'higgledy-piggledy,' is, at any rate, abnormally picturesque." There is lacking that sense of repose, he finds, which comes with obvious continuity of purpose. With the exception of a single group, the houses are all of what may be called the English cottage style—that renaissance of English domestic architecture of the 16th and 17th centuries originated by Norman Shaw and carried forward by Lutyens and others. That perhaps is of itself significant, for, as Mr. Adshead points out, there are styles which are more amenable to the introduction of modern conveniences. He raises a query as to whether department store furniture is quite suited to the kind of interiors these houses have; whether wooden door latches are the cheapest and best the age can produce; whether, if silver candlesticks do not show to advantage on chimneypieces of rough brick with wide mortar joints, the candlesticks or the chimneypieces ought to go? But if there are some anachronisms, and one living room that "might well suit the prehistoric cave dweller," he found many houses that were thoroughly delightful, both inside and out, and he says that those which drew the prizes "were very sensibly and economically planned." As to an American viewpoint, an architect from this country is likely to feel constraint in offering a criticism when he remembers, (1), the competition which normally exists between the "cottages" in any American suburban colony which has aesthetic aspirations; and, (2), the deadly monotony and unimaginative starchbox repetition, or the straining after false gods,

where, in the absence of aesthetic aspirations, the builders have had sway alone. His heart has a welcome ready for the picturesqueness that may be given to houses that cost the equivalent of £400 or £500, and custom has made him callous to competition of designs.

CIVIC CENTER FOR ALBANY.

State Architect Franklin B. Ware, in his annual report to the New York legislature, recommends the erection of two new public buildings in Albany—A Hall of Records and a Temple of Justice. He proposes, with the governor's approval, the state's gradual acquisition of land all around the Capitol, to the end that, as new buildings are located, there may be developed on Capitol Hill an architectural group which shall be worthy of the State of New York. Thus far it is an admirable recommendation, and one that may even be said to have been inevitable.

For the details of the plan of Mr. Ware, however, approval must be more restrained. His suggestion is the not unfamiliar one that a Civic Center be created to the west of the Capitol—behind it, as one comes up the State Street hill. He proposes that the State buy the two blocks bounded on the east by the Capitol grounds, on the south by State Street, on the west by Swan Street, and on the north by Washington Avenue. On one side, the west face of the Capitol will look out upon the reservation; on the other side, the new Educational Building will front upon it. If the Temple of Justice were in fact put here and other buildings eventually added, we should have an architectural group of indisputable impressiveness. But the enclosure must always be thought of as the Capitol's back yard. Though it were the only "Center" of the kind to be developed, its place would be secondary. That the new Educational Building is so located as to invite such arrangement is not the least of that structure's faults.

To the front of the Capitol values are higher, but not so much higher that the great State of New York, if taking up such a project at all, should consider that the saving would justify a second rate scheme. The Capitol Park lies to the front, or east of the Capitol. There would be no need of acquiring any land save actual building sites. Already, as public structures facing the park, are the old State House, Richardson's City Hall—are of the most beautiful buildings in the United States; and the brown stone Academy—a potpourri of architecture indeed, as fitting the various periods at which the buildings rose. But the assemblage is probably still capable of union, if there be suitable and well placed additions, and if there be re-arrangement of the planting scheme, into a group of which the Capitol, on the higher ground, would be, as it ought to be, the crown. Back of the Capitol, in deference to the long drawn out and inescapable Educational Building, there might well be a small park—a square, in which elms will throw an academic shade, and around which churches and other semi-public structures might well gather to form a secondary and scholastic group. The land for this would cost, Mr. Ware estimates in planning to develop it as the Civic Center, only $400,000—a mere fraction of what one city of the State has spent more than once for a single playground.

There is a growing list, already long, of State Capitols that have had plans made by experts for their wise development. In Connecticut, Pennsylvania, Ohio, Iowa, Minnesota, California and South Carolina, this work has been done. In Rhode Island, Massachusetts and New Jersey, plans for it are now under way. New York would do well to follow the example—at least before embarking on an undertaking so important as that now suggested by the State Architect. Mr. Ware himself would doubtless be the first to welcome such advice.

DELHI TO BE PLANNED.

The dramatic announcement by King George that henceforth the capital of India will be Delhi has been promptly followed by the welcome news that the Indian government proposes to call upon "the best skill and experience of Europe" for the preparation of the city's plan. In so doing, it will be following where the government of Australia has led, for an international competition for the planning of Australia's capital is under way. The latter will be a new, fiat, city, while Delhi has already a population which approaches the quarter million. Yet most of the area to be especially dealt with is still undeveloped, and the historical and social and even racial problems that are to find architectural and topographical expression at Delhi would seem to promise a result far more interesting than in the brand new capital of Australia. It is to be expected, and certainly to be hoped, that in the planning of an imperial Delhi, the European experts will not have full control; but will serve only in an advisory and consulting capacity with local talent.

PRAISES POSTERS.

A Boston landscape architect, in a personal letter to the editor of this Department, dilates on the picturesqueness of advertisement-plastered Scollay Square. To such heretical general enthusiasm, he has the courage to add this specific tribute: "The view up Hanover Street is particularly interesting at night, as the Star Theatre is then covered with lighted signs and the large star at the entrance is kept revolving." The man has not the past of a cowboy; he may be believed to have few ideals in common with those of the late speaker of the House, in Washington. Yet he likes the color, life and picturesqueness which billboards may add to dreary scenes—"amid hard lines, ill-proportioned masses and dismal, dingy color, it seems to me that there is nothing that helps so much as to cover square rods with gay, silly, jolly sheets of advertisements." Then he adds to his letter two interesting reflections. To the first, perhaps no one will take exception; to the second, very few indeed will subscribe. "The immediate inference from examples of the kind offered by the Star Theatre is that advertising men have been far quicker than architects to grasp the value of a conspicuous street terminal, or other conspicuous position: and, moreover, that architects are remiss when planning buildings of a certain type not to provide, as a part of their external decoration, suitable frames for advertisements. The latter will be vastly improved if properly managed, and will be used in any event." An important point here, which seems not to have been fully weighed, is whether an advertisement so cleverly managed as to lose its intrusiveness does not thereby lose most of its effectiveness as an advertisement.

AN ARCHITECT'S ALLEGORY.

To the "Survey," J. Randolph Coolidge, Jr., has contributed "An Allegory of Metropolitan Planning" which is almost too good to abbreviate. Fully to appreciate it, one must know that Mr. Coolidge is a member of the temporary Metropolitan Plan Commission, Boston, which has recently reported on the necessity of the thirty-eight towns in Boston's metropolitan district getting together in plans for their future development. Just to give a hint of the allegory, it may be said that he tersely describes how thirty-eight families, having made up their minds to build, agreed to go shares on roof and cellar, and then proceeded individually to make their plans. He tells how the Brooklines wanted an elegant suite with tiled baths, French windows, open fire-places, and white marble exterior; how the Miltons schemed a cosy flat with English half-timbered work outside and leaded windows; how the Nahants wanted sleeping porches and white stucco, and the Somervilles concrete blocks; how the Wakefields preferred stained shingles and the Winchesters a Colonial effect; how the Quincys stood for seven-foot studding and the Reveres for twelve; how the Lynns were content with a narrow entry while the Swampscotts demanded a wide one; how at last the families found it necessary to call in an architect, and how they then discovered that he builded better than they knew.

EASTER TOWN-PLANNING TRIP.

The program of the Easter trip, which is annually conducted on the Continent under the auspices of the National Housing and Town-Planning Council of England, is this year unusually interesting. This is because the beaten track through familiar German cities has been abandoned. If the new route touches several cities that are hardly less well known to tourists, it may at least be said that their housing and town-planning characteristics have not been so much exploited, and that after years of study of German "picturesqueness," it will be interesting to turn to the formalism illustrated by the planning of Nancy, Carlsruhe, and parts of Geneva and Lausanne. For the tour is to include all these cities, and in addition, Berne and Zurich. At Lausanne, by the way, the city council has the right of criticism, and even of veto, in regard to the designs of buildings, so having opportunity to control the architectural development of the city. The party is to start from England April third.

HISTORIC TABLE IN THE OCTAGON.

To the Octagon House in Washington, the headquarters of the American Institute of Architects, there has been restored the table on which the treaty of Ghent was signed in the Madison administration. Over the door which leads from the hall into the circular room occupied by Secretary Brown is a tablet which states that the Treaty was signed in that room, and back to that room now goes the historic

table. It is of mahogany, small and round, and was probably used as a card table in the Tayloe family. Old Colonel John Tayloe built the Octagon, and the Treaty came to be signed there because when the White House was burned in 1814 President Madison accepted his invitation to move over there. The table remained in the family's possession for several generations, and finally reached San Francisco. There it was purchased by the local chapter of the A. I. A. and presented to the national headquarters.

SUCCESS OF CO-PARTNERSHIP TENANTS SOCIETIES.

Co-Partnership Tenants, Ltd., the cheap housing society of England whose operations have done so much to promote the success of the Garden City movement in that country, presents figures for the year 1911 which to an American seem quite amazing. The organization has raised no less than £55,737 in stock during the year, thus increasing its capital to about a million dollars. In addition to this, the federation of such societies in England has raised mortgages of £180,500 and has added enough to its stock capital to make a total altogether of nearly £275,000 raised during the twelvemonth—a striking evidence of the confidence with which the movement is now regarded. It is to be noted also that the movement has not only made great progress in the development of estates already in existence, but in educating public opinion to approve of the Garden City, or Garden Suburb, idea. There is nothing like the sight of visible success to convince the skeptical. At Hempstead, for instance, where the Co-Partnership interests are said to extend now to about 150 acres, the tenants are shown to be receiving not only four and a half per cent. interest on their loan stock, but dividends on their rents, besides having very attractive homes in a very attractive suburb.

A RESTORATION THAT SURPRISED.

In order to cut down the vast area of frame and canvas, in the painting of "Webster's Reply to Hayne," the Boston art commission lately ordered its removal from Faneuil Hall. Just after it came down from its accustomed place, a meeting was held in the Hall and for the first time in two generations, as one of the papers said, it became possible to behold the interior of the "Cradle of Liberty" as its architect had designed it. The hall is described as greatly "lightened up" by the change; three round arched windows which the painting had covered came into view back of the platform; while the gray and white tinting which has been newly given to the walls brought out the beautiful chastity of ornament "in all its eighteenth century elegance." The restoration of the group of round arched windows to the full view of the audience was declared to give the keynote to the whole scheme, making possible again an appreciation of the harmony of the complete design. As the painting also is of value, the incident offers an interesting example of the readiness with which even art lovers can thoughtlessly injure one good thing in order to emphasize another.

At the last annual meeting of the American Institute of Architects a committee, consisting of Arthur Wallace Rice and Alexander S. Jenney was appointed to consider a plan which had been submitted to the officers of the Institute for a cruise during the coming summer and fall through the eastern Mediterranean. The committee, after a careful investigation, reported enthusiastically in favor of the idea, and the Secretary of the Institute, Mr. Glenn Brown, has issued a notice to members, recommending their participation in the excursion. The itinerary of the proposed tour is certainly a most attractive one. The party will sail from New York on August 17th on the North German Lloyd steamer "Koenig Albert." Naples will be reached on the 29th and a day or two will be spent at Paestum and Pompeii. On September 1st the party will board the yacht "Althieva" and will spend the next week on the coast of Sicily, visiting the various places of interest, which can be reached from the sea. By September 11th they will be in Athens, after having stopped en route at Olympia and Corinth. Five days are devoted to Athens, and thereafter follows in rapid succession Epidanros, Mycenae, Knossos, Rhodes, Kindos, Didyma, Ephesus and Troy. The three following days are passed in Constantinople. On the way back the party stops at Delos, Naxos, Elensis, Aegina, Delphi, Corfu and the most interesting places on the Dalmation coast. On September 9th they disembark at Venice and the day following sail for home from Genoa. The boat on which the cruise will be made is especially planned and equipped for the purpose, and members of the Institute are offered an opportunity of taking an unusual and interesting vacation at a very moderate cost.

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THE ARCHITECTVRAL RECORD

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THE
ARCHITECTVRAL
RECORD

MAY, 1912

VOLUME XXXI NUMBER V

A RENAISSANCE IN COMMERCIAL ARCHITECTVRE

SOME RECENT BVILDINGS IN VP-TOWN NEW YORK

By C. MATLACK PRICE

A LITTLE OVER FIVE YEARS AGO the standard of excellence in commercial architecture was raised to a height previously unknown by the erection of the buildings for Tiffany and Company, Gorham and the Knickerbocker Trust Company. The effect of these buildings was to start a wave of ambitious alteration and construction from Madison Square to the Plaza—a wave which even now is not, perhaps, at its height. New buildings began to appear above Forty-second street, which zone has witnessed the greater part of the new work of the past twelve months, and the metamorphosis of New York shop-fronts is of such a significant nature that a review of their present aspect cannot be out of place.

The architects who are represented in this fast-growing array of varied types of design are, for the most part, among the most prominent in the city—Carrére and Hastings, Warren and Wetmore, Harry Allan Jacobs, Delano and Aldrich and J. H. Freedlander, as well as several newer firms.

It is doubtful if any one year has seen the erection of the type of commercial building dealt with in this review to so great an extent as this last year in New York, while every week is signalized by the demolition of some older building and the commencement of a new one. On both sides of Fifth avenue, and in sites near the avenue, in many side-streets, are appearing new business premises whose architectural aspect is of marked interest, for the reason that each one represents, apart from the considerable cost of its construction, a manifest intention on the part of each owner to express in it, to the best of his understanding, a symbol of the character, dignity, standing and prosperity of his house in such a manner and locality that all who run may read.

Thus the aspect of this strenuous year of commercial building must necessarily

attract no small amount of critical attention on account of the occasion which it presents for the study and comparative analysis of the varied stylistic expressions which it presents—of expressions of many different kinds which are governed throughout by the same sets of conditions. In other words, each one of these buildings was primarily designed to furnish premises for the housing of certain more or less exclusive business firms in quarters which should reflect their aims and ideals, yet each one was restricted, in extent varying but little, as to the area of site and as to the location on or near the most exclusive shopping avenue of the city. How then, other than by attribution to the personal preference or taste of the client and the architect may the amazing diversity of styles in design be explained?

It is fortunate that up to this time, no attempt has been made by architectural dilettanti to talk of an "American Style" in city architecture. It is fortunate inasmuch as there is no such style, never has been and, in all probability, never will be such a style. That all our city buildings are based in their design and detail upon European prototypes is too obvious and well known to enlarge upon, and it is manifest that we can consider and criticise these buildings only as adaptations, of which the success or failure must rest solely upon the cleverness or stupidity with which the adaptation has been carried out.

For those who lean toward nicety in designation, I will take this opportunity to illustrate this point by paraphrasing certain remarks which I have made elsewhere upon the critical analysis of domestic architecture in this country.

To say that "The building recently completed for the Messrs. —— on upper Fifth avenue is a striking example of Italian Renaissance architecture" is absurd. The facade of the Palazzo Strozzi, in Florence, is a splendid *example*—the building on Fifth avenue is an *adaptation*. It cannot or could not be an example. With this in mind it is possible to form more intelligent and more definite critical conclusions regarding the recent additions to the gallery of Fifth avenue architecture. Owing to the great diversity which our tastes seem to exhibit, general remarks or broadly taken comparisons are worse than useless, being not only confusing, but individually unfair to the buildings under consideration.

The lucidity of a review may be impaired so seriously by a hair's breadth deflection at the outset, that it is worth while to define a certain method of observation—especially where the buildings to be reviewed are of such widely differing natures, and where it is so stupid to say, in an off-hand manner that one is better than another. It would be as absurd to say that St. Patrick's Cathedral is a better building than the New York Public Library, or that a fork is better than a spoon.

Furthermore, to speak personally, I have little patience with the reviewer who fancies but one style, and seeks to make it paramount by the disparagement of all others. It is understood that one has one's preferences, but if a certain building happens to be a well-studied adaptation of Italian Renaissance and a certain other an equally well-studied adaptation of Louis XVI, I refuse to condemn the first and hold it up to the derision of all architectural critics simply because I prefer French architecture of a certain period.

Comparisons, in the case in hand, are worse than odious—they are stupid. Whether this country is to be congratulated or not upon the diversity of its architectural inspiration is a matter that has concerned critics for some time, and never so much as to-day was it a matter calling for such nice discrimination.

In the "Victorian Period," when our city architecture was a half-hearted copy of the most debased type of building in Paris, it was reasonably safe to dismiss it all with a general and sweeping condemnation as "an imitation of something which, even if genuine, would be undesirable." Then came a period dominated in the country by the fantastic vagaries of Eastlake, and in the city by men who consistently misunderstood Richardson, while endeavoring to copy him.



NOS. 556-558 FIFTH AVENUE NEW YORK,
CARRÈRE & HASTINGS, ARCHITECTS.

It was a period in which the architectural *ego* must have been in a flourishing condition, for we blythely undertook to improve upon the classic orders themselves, and to no less blythely ignore the beauties of the Italian Renaissance and the French revival of the eighteenth century. Certain other architects worked with a comprehensive and thorough misconstruction of every precept in Ruskin's writings, which formed at the time almost the only current collection of essays on architecture. Forgotten were the chaste and dignified ideals of the Classic Revival which produced "Colonnade Row" on Lafayette Place, and designers seemed to fancy themselves endowed with an original genius eclipsing that of the Renaissance Italians, the Brothers Adam, Christopher Wren and Inigo Jones rolled into one.

Lastly, and with infinite present ramifications, came the era of studied adaptation, ushered in by McKim, Mead and White, who popularized the style of the Italian Renaissance to an extent which made it foremost in the better buildings of the city. In addition to this type of architecture, the same firm also introduced a style which has become known as "Harvard," due to a certain similarity which it bears to some of the older buildings at Cambridge, but which, when all is said and done, is neither more nor less than a modified "Georgian." In the city it was characterized by a façade of brick with stone trim and detail, with occasional light iron railings—the brick selected to show burnt ends at random, thus effecting, for the first time in modern architecture, a *texture* in that material. The style, as such, is better illustrated, perhaps, in the street elevations of the Harvard Club than in any building in New York City.

The bars of local precedent were let down, and the pages of the architectural achievements of all past ages in Europe were eagerly scanned by American architects for new inspiration. Holland Dutch, "Francis 1st," Modern French, Renaissance Italian, various kinds of Gothic and half a dozen other styles and sub-styles sprung up like mushrooms, to the complete stupefaction of the lay beholder and the serious concern of the professional observer.

Whether this diversity is desirable in itself is a question by no means readily answered—whether it is desirable as a step toward the evolution of a national architecture (assuming such an architecture to be possible) is immediately answerable in the negative.

As long as such successes are achieved in the adaptation of foreign styles, it is certain that the conservative client will defer the investment of his thousands of dollars in a new and necessarily experimental style of architecture, until the millenium.

Everything is against consistency or originality in architectural design in this country, for we must reckon with the modern facilities for extensive travel, the multiplicity of books on foreign styles of architecture and the excellence of photography and printing to-day as compared with the isolation and centralization of all means of inspiration in the periods and countries which saw the naissance and evolution of the great architectural styles of Europe.

One result of our present diverse expressions of what we severally consider good city architecture is that its adequate criticism has become as complex as the study of architecture *in toto*, and the critic is forced to treat of it in terms relative rather than absolute. Each case is an individual study, and even a comparison would lead to no more illuminating conclusions than Chesterton's hypothetical comparison of "red" and "triangular."

Furthermore it is useless to deplore the diversity of our present essays in architecture, and it is far more purposeful to present a review of our recent acquisitions, with the idea that no small amount of pleasure may be derived from an appreciation of such qualities of excellence as they may have attained.

It is the intention of this review to outline a few individual observations on the more interesting commercial buildings which have been completed within the last few years, or which are still in process of construction.



NO. 7 EAST 43D STREET—DETAIL OF UPPER FLOORS.
Delano & Aldrich, Architects.

II.

By way of limiting the field of this review it may be said that it is intended to speak only of a certain type of commercial architecture, of date not prior to two or three years, and of location on or within one block of Fifth Avenue, New York City.

It is not intended to deal with the "sky scraper" or the loft-building type, but solely with the more exclusive type of shop building. The loft building is essentially a business venture—its purpose being to offer quarters to any kind of business, it has no specific character to express and depends for its architectural values (if any) solely upon the ambition of the owner to offer greater superficial attractions than his competitors. The shops which form the subject of this review, however, have a status between the loft and the private house, inasmuch as they are designed both for business quarters and with a view to expressing as much as possible of the prosperity, standing, character, and even the ideals of the business firm for which they have been built.

Of buildings which show elements of French influence, three may be instanced which show high attainment in sucessfully designed adaptation.

Of these the premises at 560 Fifth avenue, by Warren and Wetmore, not so recently finished as other buildings included in this review, shows, perhaps, a more beautiful study in grace and refinement than any building of its sort in the city. Its general proportions are no less excellent than the character of its detail, which is as finely conceived and disposed as the most captious critic of eighteenth century French architecture could require.

The base, which is of black *"Porte d' Or"* marble, more generally known as "Black and Gold," is relieved by highly burnished bases and capitals of brass, stamping the building with a certain distinctive element entirely its own.

Above this base rise delicately attenuated pilasters, straight to the main cornice, and so delicately proportioned are these that they group as well in pairs as in the three that appear in the corner when the building is viewed at an angle. It is doubtful if the arrangement of the three stories of windows on the front elevation could have been better composed, from the simple balustrade at the bottom of the *"premier etage"* to the console-keystone at the top of the fourth floor. Admirable reserve was shown in decorating the frieze in the main cornice only above the pilasters, while the treatment of the pediment story above, with its severe yet delicate iron rail and block cornice is of exactly sufficient detail to show that it was a matter of careful study, yet of a simplicity which does not detract from the more important part of the building.

A building a little above this, on a similarly disposed plot at 595 Fifth avenue, shows a different treatment of the same theme, though with less in it to suggest French origin. This building was designed for a china shop by Severance and Schumm, and seems to illustrate the idea of "refinement thrice refined" in its every member. Its material is a warm, ivory-tinted marble, which is shown to its best chromatic values in the broad panelled expanses which form the most prominent feature of the building.

The lot being unusually narrow, a clever expedient was adopted in utilizing the entire width for a show-window by placing the entrance at one side. Nearly all the detail of the façade was disposed in the treatment of the show-windows, which are framed in a nicely proportioned moulding of figured marble. In the entablature above this, as in the first string-course and main cornice, every moulded member shows the most extreme refinement. An interesting feature of the first string-course is the wide cove-moulding, which may be seen in profile against the old "brown-stone front" at the left of the wide show-window. The only ornament on the front and side elevations is the delicate strip of Greek wave-pattern, while the main cornice itself is of ultra-refined composition, relieved only by its modillions. Much of the character of this building is lost in the failure of a photograph to show the warm tint of the marble which was used.

The same type of French architecture as that so gracefully shown in Warren & Wetmore's, 560 Fifth avenue, is shown with a little more boldness (as befits its greater height above the street) by Delano and Aldrich in their building for a music publisher at 7 East 43rd street.

The detail shown is at the seventh story, in which it was the intention of the architects to dispense with a deep overhanging cornice, and to effect the needed terminal diversity by means of elaborating the top story. There is very little projection either in the uppermost horizontal member, or in the string-course above the tall window-openings of the lower façade, yet the building, curiously enough, cannot be said to have an abrupt or unfinished appearance. Further architectural interest is lent by the fact that the three central windows on this top story are of circular shape, while the four axes of the main vertical piers are emphasized by the four terminal urns against the sky-line. The ornament is handled with that nice reserve so absolutely essential to a successful rendering of this sort of French architecture—nowhere is the relief too bold or the profile too full. The great lyres, in place of flat cartouches or medallions, are symbolic of the trade for which the building was erected, and the whole scale of the detail is accurately adjusted to the height at which it was to be placed. It is a successful execution of a clever conception—and an illustration of the idea that a commercial building may practically and adequately house a business, and may at the same time be an example of architectural design.

Still adhering to eighteenth century French architecture, it remains to consider a new building for an exclusive firm of interior decorators at 16 East 56th street, by Harry Allan Jacobs. Here the inspiration was derived from



NO. 560 FIFTH AVENUE, NEW YORK.
WARREN & WETMORE, ARCHITECTS.



NO. 16 EAST 56TH STREET, N. Y. CITY.
Harry Allan Jacobs, Architect.

Versailles and the Trianons, and rendered with an effect which could have been improved only by the employment of white marble instead of artificial stone for the façade.

The show-windows, as in many buildings of this type, is severely simple, being designed to show a mere suggestion of the character of the firm's stock, rather than to show how much, as in a department store. One chair and a bit of tapestry may grace this window, or a single bit of rare furniture. Above this window is the oval window—one of the happiest details of the period, while the tall Corinthian pilasters indicate that the foyer or lobby of the building is of lofty proportions. Above this a conservative treatment of the windows takes the eye to the upper story, where the blind front denotes a high-studded room within, lit by a skylight and designed for the adequate display of rare tapestries. Its treatment is an excellent one in consideration of the difficulty which arises in the problem of a blank wall-surface, and it is only to be regretted that the architect's original scheme was not carried out. This scheme showed, in place of the raised panels at the right and left, in the spaces between the pilasters, two niches with statuary. Even the small oval wall-niche with a bust, so characteristic of the period, would have made a splendid design for this upper story. As it stands it is a carefully studied adaptation of a style which is among the most difficult to reproduce in convincing terms to-day.

Departing from the traditions of earlier French architecture, and exemplifying with remarkable accuracy of feeling the type known as "Modern French" is a jeweler's shop at 716 Fifth avenue, designed by Maynicke and Franke. It is difficult, indeed, to realize that a façade so thoroughly and essentially "Modern French" could have been produced in this country, for every detail is in accord with the feeling of that much-discussed and much-abused type of architecture. As a consistent example of the style this little building rivals the Hotel Ansonia, which was designed by that eccentric and gifted "Cartouche"



NO. 716 FIFTH AVENUE, NEW YORK.
MAYNICKE & FRANKE, ARCHITECTS.



NOS. 192-194 FIFTH AVENUE, NEW YORK CITY. CARRERE & HASTINGS, ARCHITECTS.

Dubois, who, however, was an "imported" designer, and one naturally capable of imparting to the Ansonia the true spirit of the style.

It is the more remarkable, then, for a local architect to achieve such a faithful study, for this little building is thoroughly French, from its flamboyant glass marquise to its twin terminal urns —a façade replete with those delightful architectural fantasia of which the keynote is irresponsibility and gaiety. Many of our hotels have seized upon the psycologically cheerful values of modern French architecture, but this is the first commercial building to exploit so direct a rendering.

Whether one fancy (from a personal viewpoint) the character of modern French architecture, or whether one unaffectedly despise it (as many do) it cannot be denied that here is a perfect adaptation of it—with the possible exception of a feeling that the base is a little hard and severe, not only for the rest of the building, but for perfect conformity with the character of the style. There is much to admire in the happy handling of the pediment behind the superficial curved pediment, and in the nice transition between this full curve and the flat arch of the window. It can never be said of the style that it is meagre or parsimonious, or that its detail is sparingly used, and that it is a luxurious sort of architecture is manifest in the amount of skilled stone carving which this detail demands. There are many designers, however, who adhere firmly to the opinion that its aesthetic extravagances are little short of immoral, and that it should be held up to the derision of every self-respecting architect. Perhaps it would not be profitable to discuss the very problematical value of comments of this sort, inasmuch as they are opinions rather than criticisms.

Leaving those buildings which might be considered as being of "French extraction," the review proceeds to deal with several whose legitimate ancestors would seem to have been Italian.

Of these one of the most imposing is the art gallery at 556 and 558 Fifth avenue, by Carrére and Hastings, the most superb, perhaps, being the great jewelry establishment at 192 and 194 by the same firm of architects, and the most charming, a piano shop at 433 by Harry Allan Jacobs.

The first presents a monumental façade of Chasignelles limestone, imported from France—a façade designed with the imposing dignity of the great Italian *palazzi*. The arched openings in the deeply rusticated and "worm-eaten" base story, the tall *"premier etage"* windows, with column and pediment and the balustrade above the main cornice—these are the salient external features of the city architecture of the great Italian Renaissance. The arches to the right and left form the settings each for a single rare painting, while the central arch admits to a lofty foyer, with marble columns and a dignified grandeur of detail.

The uppermost story, as in the decorator's establishment at 16 East 56th street, shows the blind wall of a gallery with overhead light, though in this case no attempt was made to treat it architecturally, the building being assumed, by virtue of its height, to terminate above the main cornice and balustrade.

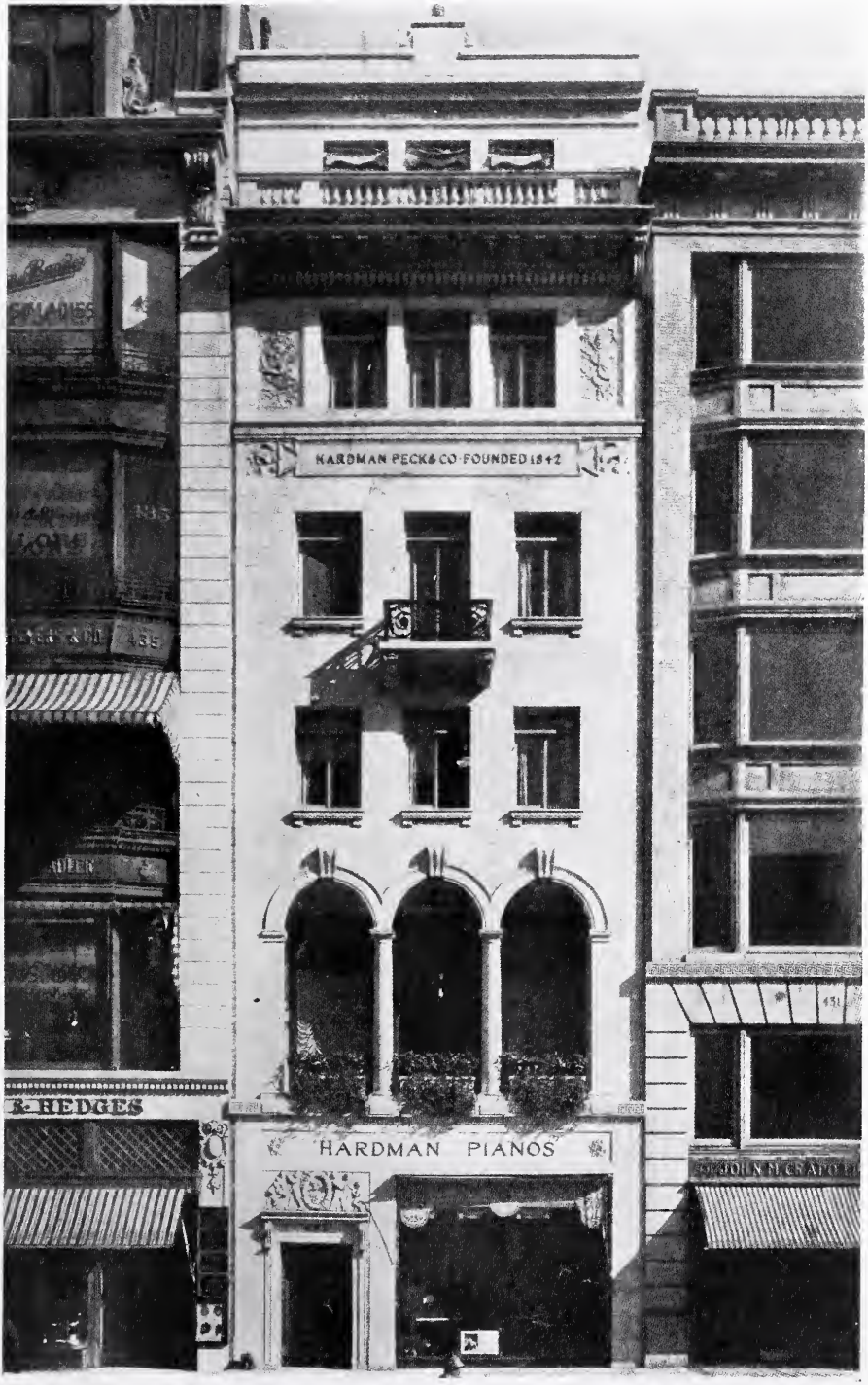
Greater beauty has undoubtedly been achieved in the rendering of Italian Renaissance as displayed in the great building at 192 and 194 Fifth avenue, designed also by Carrére and Hastings for the premises of a great house of jewelers and silversmiths. Here is a building in every sense comparable with the now well-known buildings by the firm of McKim, Mead and White for Tiffany's and Gorham's.

Owing to its present incompletion it is possible to show only its design above the first floor, thereby missing the beautifully delicate bas-relief work above the doors, between the pilasters of the base.

The first striking feature which meets the eye is the rounded corner, which gives an interesting break both in the first string-course and in that below the top story, where the curved surface is exquisitely ornamented with a great cartouche.



NO. 433 FIFTH AVENUE—DETAIL OF TWO STORIES. HARRY ALLAN JACOBS, ARCH'T.



FACADE OF BUILDING AT 433 FIFTH AVENUE, N. Y. CITY. HARRY ALLAN JACOBS, ARCHITECT.

The entire treatment shows a nice blending of richness and reserve in the handling of the ornament. The heads of the tall two-story windows are beautiful, and the bas-relief of the top story is excellently decorative in effect, but reserved in its rendering, giving this terminating member of the building, with the Italian balustrades beneath the windows, an absolutely adequate appearance. The cornice, unfortunately lost in shadow in the photograph, is of the Italian type, of two tiers of modillions, which it is proposed to paint in the manner of the cornice of Donn Barber's building for the Lotus Club.

As a whole, this building presents an example of the finest type of commercial building in this country, and as a study in the adaptation of an historic style is a monument of well-studied reserve and unimpeachable taste. The same general type of detail is being skilfully employed by Carrére and Hastings in the nineteen-story business building which is in course of construction at Broadway and 58th street, the facings of the building being in white marble to its entire height.

The piano house at 433 Fifth avenue, by Harry Allan Jacobs is one of the unqualified successes of the year in the list of new business buildings.

Essentially of Italian inspiration in design, it presents many features well worth studying. In a commercial building of this type one of the most difficult problems with which the designer has to cope is the disposition of the blank expanse of show-window which the building demands. Here it is cleverly enriched by the almost theatrical design of the curtain, which carries the horizontal line of decorative interest established by the beautiful panel above the door. By this frank but ingenious expedient, the effect of the ground story of the building is raised far above any danger of being either commonplace or uninteresting. Above this is the triple arcade, which not only gives an interesting play of shadow at this point, but also, owing to the slender proportions of the columns and the delicate refinement of the moldings, suggest that element of *grace* which has been consistently carried out as the keynote of the entire building.

In order to lower the apparent height of the façade, the main cornice and balustrade was placed at the fifth floor, which causes the sixth to recede into the background, and tends to make the whole design more compact. To further emphasize the intention of considering this fifth floor as the termination of the building, it was elaborated with delicate bas-relief panels of musical "attributes," and marked off with a slightly projecting string-course and the name-tablet of the building. Lest the two stories intermediate between this and the arcade might seem neglected, a balcony was placed at a central window, striking a note of interest and affording a strong shadow. The entire façade is in white marble, except the columns, which are slightly figured, and the whole is, perhaps, one of the most exquisitely graceful buildings ever dedicated to a commercial use.

One of the most interesting particulars to be remarked in connection with this building is the frankness and sincerity of its treatment—free from any restricted academic formality or personal mannerism, yet essentially expressive of the highest ideals of abstract architecture. To quote some remarks made elsewhere upon this building: "It is a theory on the part of Mr. Jacobs that such architectural expression as this building may possess must have values of permanent significance only in so far as it presents an earnest and sincere intention on the part of the designer to combine the practical considerations of modern necessity and convenience with the greatest possible element of abstract architectural beauty." It would seem that he has erected a marble monument to the truth of this theory in the form of this admirable building.

Again of Italian derivation, but utterly unique in this city, is the charmingly designed little shoeshop at 548 Fifth avenue, by Carrére and Hastings. The salient feature of its façade, the delicately and beautifully rendered *"sgraffito"* decoration, which as applied to the exterior treatment of buildings in

this country, is as rare as it is exquisite in this example. Rarely has a more "cheerful" façade graced a city street on this side of the Atlantic, and the unique and distinctive effect of this application may constitute as it were, a sufficient excuse for a slight digression upon the art of "*sgraffito*."

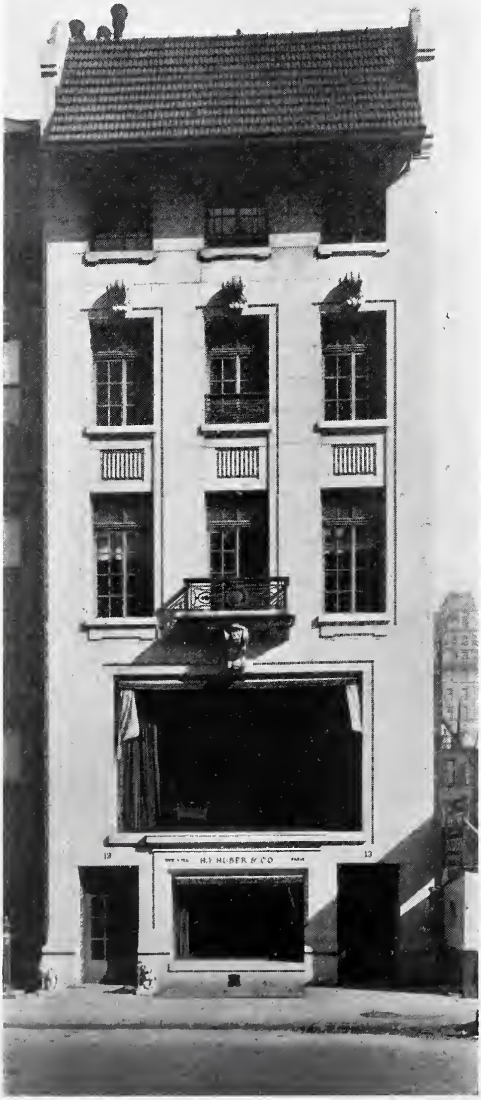
Vasari, an early Italian architect, says that Morto da Feltre (an architect of the late Renaissance in Italy), "when he returned to Florence (about 1510) from Rome, went to stay with Andrea Feltrini, to whom he imported the newly discovered art." Da Feltre returned from certain of those early Roman excavations, conducted by Raphael, where those marvellous discoveries were made which furnished inspiration for the designers of Italian Renaissance, and while this *sgraffito* work which was discovered at the time was of Roman execution, the art was also employed by the Etruscans. After a little practice on the part of Andrea Feltrini, who may be looked upon as the perfector of the art, it became one of the most frequent and popular methods employed for exterior ornamentation. *Sgraffito* consists of a ground of stucco or lime mixed with black, formed of ground charcoal or burnt straw, or with brown formed of sienna or other coloring. Over this is laid a thin coat of white lime made (in Italy) from ground Tavertine marble. The design is pricked through from full-sized cartoons on paper, the stucco then being scratched off until the underlying color appears where called for by the design. Often certain members of the design, as in the third-story window-frames of 548 Fifth avenue, are further accented by laying the surface in greater relief than the rest of the design. *Sgraffito* was also used for friezes around rooms and for the decoration of the spandrils of arches or vaulted ceilings, as well as for exterior façade treatment.

In the building under consideration the color of the ground is a delicate brown, and



NO. 548 FIFTH AVENUE, N. Y. CITY.
Carrére & Hastings, Architects.

the Renaissance arabesques constituting the ornamentation are disposed in a manner excellently decorative. The execution is a matter calling for consider-



NO. 13 EAST 40TH STREET, N. Y. CITY.
J. H. Freedlander, Architect.

able skill, and a keen sense of line, being executed by an Italian, Menconi, who is one of the few in this country who are capable of handling *sgraffito* work.

While there may be no "period" precedent for the metal and glass hood over the door, or for the "Renaissance" treatment of a shop window, the architects have succeeded admirably in producing an esthetically consistent complement to the whole façade. The eye is pleasantly attracted by the delicate iron railings at the third-story windows, which effectually dispel any sense of "flatness" which the building might otherwise have, and the whole is adequately crowned with a sloping tile roof, over a richly painted double-modillion cornice. In a sea of mediocrity, this cheerful little façade is an entertaining and happy oasis.

Two interesting commercial buildings have recently appeared in East 40th street, of which No. 13, by J. H. Freedlander, presents an attractive façade in white marble, and incidentally illustrates a now popular detail in the design of show-windows. The building is designed for a firm of interior decorators, and with the idea of minimizing the detraction which articles displayed in the window might suffer from an ornate frame, this frame is reduced to its simplest expression, or entirely eliminated. Thus, in the building under discussion, we have two such windows, perfectly plain, and filled with an unbroken expanse of clear, highly polished plate glass.

The building, if one seek to nationalize it, can hardly be said to be either French or Italian in character—the consoles over the tall windows and above the *premier étage* show-window certainly suggest the first, while the sloping tile roof as strongly suggests the second.

It is a building, considered all together, which can well afford to be taken at its face value as a clean-cut expression of the modern commercial building of the exclusive type, and if it lacks the compelling charm of the buildings at 433 and 548 Fifth avenue, perhaps it is the nearer to an evolution in some style more closely tending toward a national one.

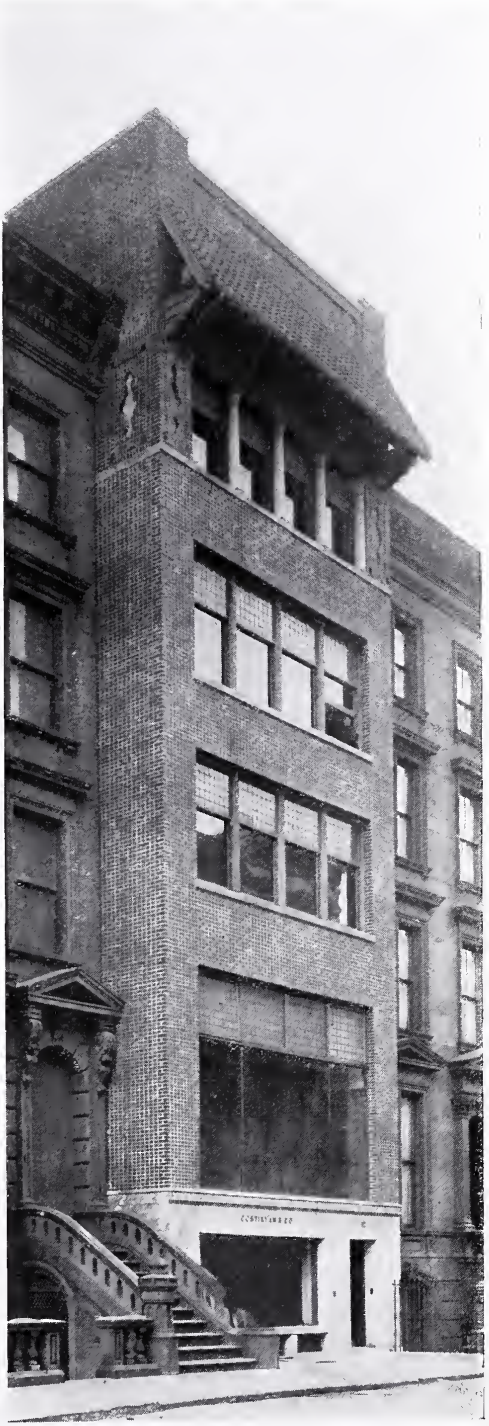
Nearly opposite stands an unusually designed building by Mann and McNeill for the business premises of a

dealer in rare rugs. There may be noted the same severe treatment of the show-windows, both on the street-level and at the *premier étage*—the glass being set in the narrowest possible copper rabbet, with nothing to distract the eye from the single rug hung within.

The bricks in the façade and side elevation are attractively set in the mosaic fashion which aroused such a storm of architectural controversy when it was first employed by the late Stanford White in the Colony Club. Only the "headers" or ends of the bricks appear, laid with joints like a checker-board, alternating natural and burnt bricks. If it be considered that brick used in this fashion is used like tile or mosaic, there is nothing "immoral" in the practice, much as it was once decried, though it is to be suggested that the outcry against it was entirely by those who had not been clever enough to be the first to exploit it. At the fifth floor, where the little colonnade of cement columns occurs, the architects indulged in a brilliant *tour de force* of masonry by depicting conventionalized Oriental rugs in variegated brick, with cement centres. A sloping tile roof on projecting brackets completes what constitutes an exceedingly interesting variation in the ever-varying theme of city architecture.

In this immediate vicinity, at No. 305 Madison avenue, stands a reconstructed building originally intended for the show-rooms of a firm dealing in garden statuary and the like. It is the work of that brilliant designer, Henry Erkins, whose sense of architectural proportion is admirably illustrated in this two-story elevation. The original building was of the omnipresent and ever-depressing "brown-stone-front" type, until Mr. Erkins, whose skill at adaptation and remodelling is equaled only by his creative genius, took it in hand. The upper stories were shorn of their display of the ill-studied and crude detail of the Victorian period, and were sanded to match the new front of artificial stone below.

This lower portion is of such perfect design that even the rather sombre and drab color of its material is forgotten



NO. 12 EAST 40TH STREET, N. Y. CITY.
Mann & McNeill, Architects.



DETAIL OF OFFICE ENTRANCE, NO. 417 FIFTH AVENUE, NEW YORK CITY. BUCKMAN & FOX, ARCHITECTS.



NO. 595 FIFTH AVENUE, NEW YORK CITY. SEVERANCE & SCHUMAN, ARCH'TS.



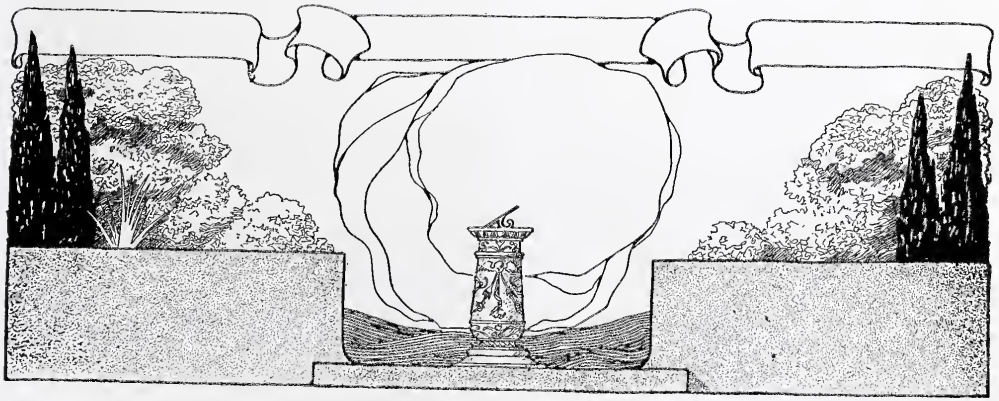
DETAIL OF THE FIRST TWO STORIES, NO. 305 MADISON AVENUE,
NEW YORK CITY. HENRY ERKINS, ARCHITECT.

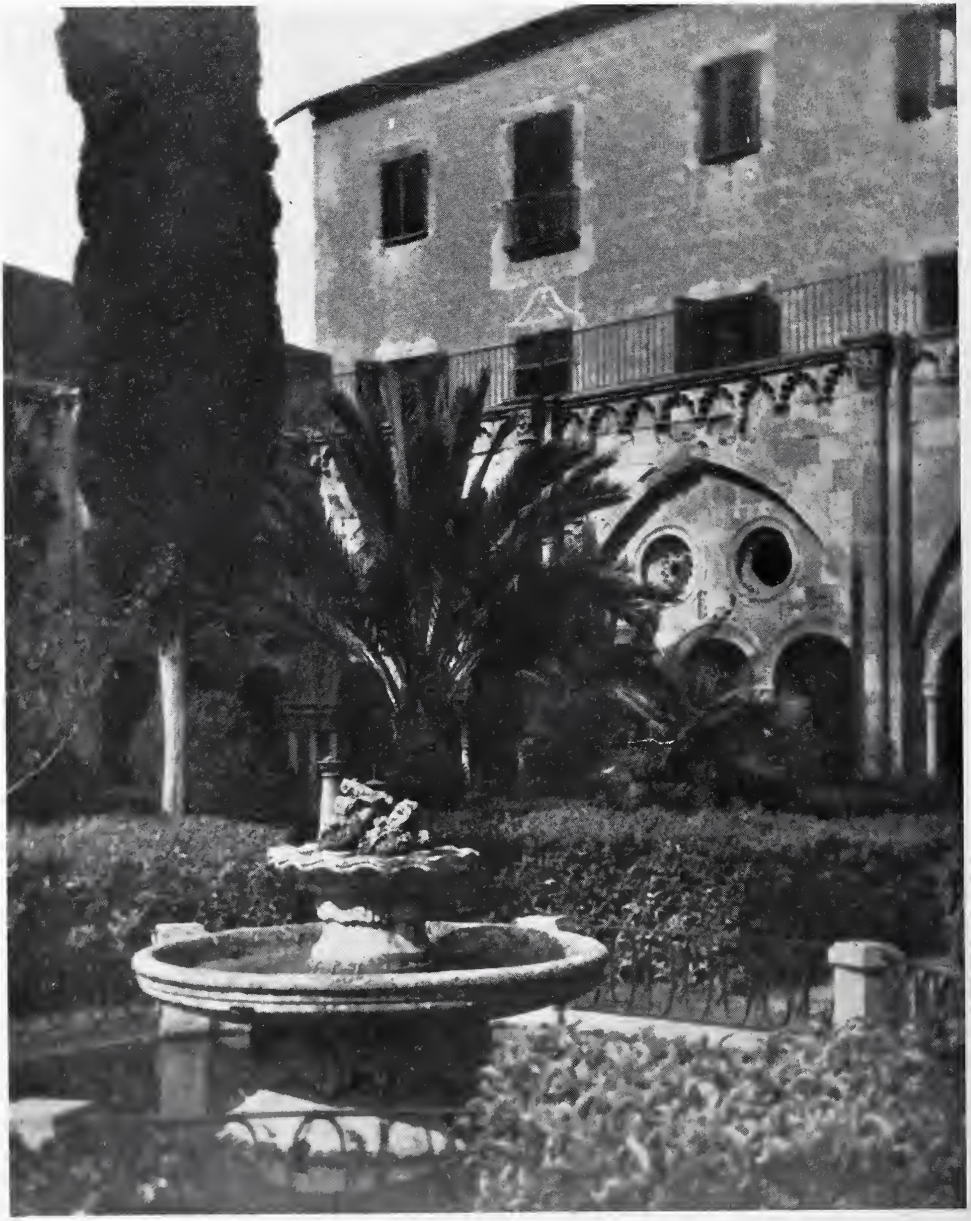
in the imagination of how exquisite it would have been if executed in white marble, with, perhaps, a colored marble for the unfinished medallions in the spandrils of the arches, and in the shafts of the columns in the arcade.

There is a nicety of feeling both in the general proportions of the principal members and in the many moldings. If anything, its general feeling is Italian, though in common with much other work by Mr. Erkins it shows a daring use of the best that is in classic and Renaissance architecture, combined with that peculiar personal freedom which was so salient a trait in the work of the late Stanford White.

That even the larger of our new commercial buildings are partaking in some measure of the qualities which make the smaller of such architectural interest is evidenced in the detail of the door at No. 417 Fifth avenue. Here is a nice eclecticism of design and treatment which makes this feature of the building more than a mere means of ingress and exit—which makes, in the main, for the elevation of our entire former standards of commercial architecture. Where it is seen throughout in the more exclusive buildings which have formed the subject of this review, it is appearing with constant frequency in larger buildings—in the studied detail of a doorway, a lobby or an elevator-grille, and one cannot but feel that the note struck in the conscientious designs of the shop-fronts of jewelers, decorators and other more exclusive business men has had its effect upon the ideals of that essentially competitive class who have too often in the past decried the expense of esthetics.

Rome was not built in a day, and New York, or even Fifth avenue, is by no means likely to reach that happy state of completion in a decade, yet it is to be doubted if any one year has ever before witnessed the erection of so many excellent or interesting examples of commercial architecture in this city, or has held such splendid promise of future achievements.





THE CLOISTER GARDEN AT
TARRAGONA, SPAIN.

A Study of Romanesque in Spain

Divided into Two Groups

Castile and Leon, and Catalonia

By M. Stapley
Photographs by A.G. Byne

If we have noticed foreign influences in the Romanesque of Castile and León, they are or should be far more pronounced in Catalonia. The thriving Catalonian seaport of Barcelona was in close touch with all Mediterranean and Adriatic ports. There was a strong colony from Constantinople in Betica and Lusitania in the Sixth and Seventh Centuries and the ancient Greek Ampurias and Rosas on the Mediterranean coast were still inhabited by Greeks; and to add to the mixture, all the Syrians and Armenians bound for Campostela landed at the mouth of the Ebro. It is thus natural that early Catalonian architecture should be full of Byzantine influences. These were mixed with Frankish when, in the Ninth Century, the Counts of Barcelona were subjected to Charlemagne the Frank, who had acquired northern Italy as well as France. Consequently, builders from Lombardy began to arrive in Catalonia, and their round Lombard campinili still stand in the Pyrenean passes. The Romanesque we have already reviewed—that introduced into Spain at the other end of the Pyrenees—was also derived from northern Italy, but it had already been much modified in France before coming south; one might say further that it was much refined in some ways, for the Benedictines from Cluny were much finer masons than were the builders who had come direct to Catalonia from Lombardy two centuries earlier.

When finally the pointed style began to creep into eastern Spain it made but slow headway; Tarragona and Lérida built their cathedrals at the same time that Burgos, León and Toledo were building full-fledged Gothic; yet Tarragona and Lérida have apses, rounded-headed windows and doors, and richly carved detail (in which Street immediately saw much resemblance to North Italian Romanesque) and they yielded to the new style only in their pointed main arches. But while the Catalans apparently considered pointed unsuitable to cathedrals, they found it fit for abbey churches, for the Cistercian monasteries of Poblet, Santas Creus, and Vallbona de las Monjas had been built in a quite advanced Gothic a half century or more before Lérida and Tarragona were built in Romanesque. By the middle of the Fourteenth Century, a truly national style—Catalan Gothic—sprang up in Catalonia and completely superseded Romanesque and French Gothic. It was the only distinctively Spanish style ever achieved on the peninsula.

On the way east from Madrid to Lérida, the splendidly preserved, early pointed cathedral of Siguenza, full of rich furniture, may be visited—entirely a French work, with many resemblances to Notre Dame of Poitiers. But so far as typical Romanesque goes, there is not much to make the traveler halt before reaching Lérida. Nor (except in the highly interesting but non-Romanesque brick city of Saragossa) would he care to halt, for the desolate, dun-colored, treeless desert through which he passes is more depressing to linger in than the steppes of Russia.

There are several remarkable bits of very French Romanesque up in the old Kingdom of Navarre—in Tudela and Pamplona, and a round Templars' church at Eunate; also in the northern towns of Aragon—Huesca, Jaca, Teruel, Tarazona and Veruela. Tudela ranks with Lérida and Tarragona in importance, and precedes them in date; while Veruela, even earlier, is the second Cistercian Abbey founded on Spanish soil and re-

garded as one of the completest examples of Twelfth Century work. The oldest part of the cloisters resemble Tarragona. It was founded in 1141 by a prince of Navarre whom the Virgin rescued during a storm and whom she directed to form an abbey for Cistercian monks. Up to that time, none of them had come to Spain, so the prince had to send all the way to Gascony in France for both builders and inmates. There is, naturally, a great resemblance between Veruela and the earliest Cistercian houses in France, both in plan and in workmanship. All the rules which the reforming Saint Bernard had laid down for his friars are carefully observed—severity in the details, absence of sculpture, the low steeple, the cloister with its chapter-house and projecting hexagonal chamber for a lavatory, and the great dormitory running along one side of the cloister. All these are very similar to the plan and the severe richness already seen in the later Cistercian nunnery of Las Huelgas, and are absolutely uninfluenced by the Byzantine elements that were then permeating Eastern Spain.

But Veruela is far to seek, and one who knows Spanish branch lines is apt to cling to the main road and take the daily express (at a speed of fourteen miles an hour) to Lérida. Lérida, commanding a superb view of the Pyreness, is a forsaken little place with as bad a climate as Burgos; but it is comforting to know that they feed one there with quantities of delicious filberts toasted and salted, or boiled and mashed like potatoes. Even a student absorbed in architecture could not forget how good they seemed midst the other strange, untempting dishes.

The town is backed up by a craggy hill and this is crowned by the cathedral, which was started in 1203. It is now a fortress, and is furthermore almost the only building that has withstood the repeated sieges, captures, lootings and recaptures to which poor Lérida has been subjected. The guide-book says that the cathedral, being now a fortress and one of great strategic importance, cannot be entered without a special permit from the *gobierno militar*. As the military governor's office hours did not accord with our time of arrival we climbed the hill, large camera and all, merely to look at as much of the building as was visible behind the ramparts. Somehow we found ourselves within the gates; a sentinel asked for the permit which we explained we intended getting the next morning at the governor's prescribed hour. The sentinel bowed politely and let us pass on. All the garrison must have been taking their siesta, for we wandered at will and took several photographs and walked out again unmolested. As the interior has been used for military purposes since 1717 it is entirely spoiled for the architect, a second flooring having been laid some ten feet above ground in the nave, thus obscuring the fine roof and capitals. Three very early Romanesque reliefs in the north aisle are almost undistinguishable under whitewash; but the massive strength of the piers is undisfigured and likewise an occasional bit of exquisite detail.

Outside, the west cloisters have been bricked up to make a dormitory. A great late Gothic octagonal tower, set askew to these cloisters, further hinders one in getting an impression of the original building from this side. The east side may be better appreciated, though there, too, the arches are mostly walled up and their tracery gone; but even in their mutilated condition, Street pronounced them the finest he had ever seen. From the tower just mentioned one may get a fine idea of the plan of the building and enjoy, spread below him, the richly stained stone roofs that have defied so much bombarding. The nave will be made out to be very short compared with the transept (the actual lengths are one hundred and one hundred and sixty-nine feet). From here also may be viewed the fine Romanesque clerestory windows and the early Gothic lantern; but no photographs being permitted we had to content ourselves with those surreptitiously obtained the day before.

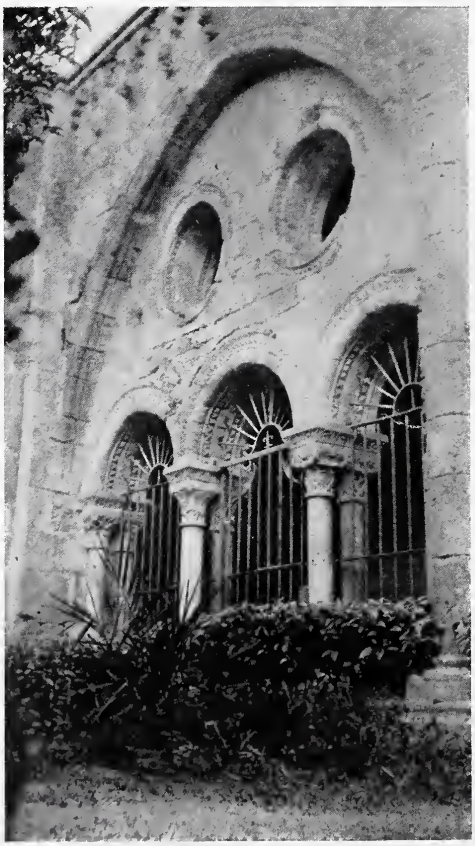
Lérida possesses three fine round-arched side doorways—in the north transept, the south transept, and one leading into the south aisle. The south transept



TARRAGONA CATHEDRAL FROM THE CLOISTER GARDEN—A COMPOSITION OF UNRIVALED FREEDOM.

doorway is dated 1215. These three doors are surmounted by horizontal corbeled cornices with rich detail that shows that the men who made it had been reared in Lombard Romanesque traditions. There are many resemblances to be recalled later between Lérida and Tarragona cathedrals, while the comparison between their predominating Lombard feeling and the Burgundian and Aquitanian type previously examined in the Salamantine district is highly interesting.

With every slowly gained mile between Lerida and Barcelona the air becomes gentler. The scenery presents some extraordinary features such as the lofty flat-topped salt mountain five miles long, with its glistening crystals taking on wonderful hues in the sunlight; and the great lonely Montserrat sharply outlined on its every side and diversified with the most fantastic rock formations; and, finally, close to the sea, the scowling Montjuich that overlooks the city itself.



HARMONIOUS USE OF TWO FORMS OF ARCH AT TARRAGONA.

Barcelona is the largest, finest and most comfortable city in Spain; but because of these very qualities, perhaps, it has but little Romanesque left. However, of the period before the union of Catalonia and Aragon in 1150, three very interesting little churches remain. From then till about 1600 came the period of the Kings of Aragon, when the city waxed very rich and, from the beginning, imported the new French style—Gothic. Then Barcelona's glory departed for Transatlantic trade became more important than Mediterranean; one's impression, therefore, is of a rich old Gothic town, and it is for the monuments of this period that the city is chiefly interesting.

Of its three very early churches, San Pedro de las Puellas, consecrated in 945, is most curious as showing the strong Oriental influence then predominating in Barcelona—a Greek cross with a single apse and a cimborio or dome over the crossing. This dome is carried by four columns with elaborate Eastern capitals, and the nave and south transept have wagon vaulting. Another church quite as old is San Pablo del Campo, which has passed through all sorts of vicissitudes, including serving as a barracks, until it was declared a national monument some thirty years ago. It is cruciform, triapsidal, wagon vaulted in nave and transepts, and has a very well constructed octagonal vault on pendentives over the crossing. Everywhere the masonry is massive and somewhat uncouth, and the sculpture in the tympanum of the west door is very Byzantine. Down at the harbor's edge lies the quaintest of this primitive group, though only one chapel with its facade and porch remains. This is the *Capilla de Marcus,* built in the Eleventh Century by a rich Constantinople merchant named Marcus, then residing in Barcelona. It is not its architecture that engages the attention so much as the curi-



INTERIOR OF TARRAGONA CLOISTERS.

ous remains of the fact that from this little chapel, after the priest had blessed them, the *Compania de Correos*, or Company of Postmen, started out on horseback to deliver letters and parcels through Catalonia as far back as the Twelfth Century. There is a cedar bench inscribed in Catalan: "Bench of the Cavalry Postmen," while under this legend are the arms of the Company, a mounted postman with raised whip in hand. Why these three almost Asiatic buildings should have survived in a city that so early became addicted to Gothic is hard to say.

One of Barcelona's few Romanesque bits is the chapel of Santa Lucia, to which the south side of the Gothic cathedral was joined. It has a fine round-headed doorway leading into the street, with most delicate carving on the archivolt; but the photographer is discouraged by the indescribably poor and gaudy modern painting of the Saint lately placed in the tympanum.

Not twenty kilometres from Barcelona is Tarrassa with three Tenth Century (and earlier) churches which must be seen. And still farther, on the same railroad, is Manresa with its busy cotton mills. Its high-perched Gothic Colegiata is very striking with its double flying buttress, while inside is a magnificent embroidered altar front, pronounced by Street the finest of its age (late Fourteenth Century). In another direction, north along the cost, lies Gerona, a city of remotest antiquity, as is proven by its Cyclopean walls. In its numerous harrowing sieges, where women too fought desperately on the ramparts, it makes Lérida's bloody story seem tame. It is a wonderfully picturesque town beloved of painters, whose sense of smell fortunately, is less acute than that of ordinary mortals.

San Pére de Galligáns is its most complete Romanesque church, built probably in the early Twelfth Century. The name, to one unaccustomed to the Catalan language, suggests that the Saint may have been Hibernian, but he was an authenticated native of Gerona who, I believe, early suffered martyrdom on the spot. It is a massive fortress church, with no side doors or windows below the clerestory, and with its apse forming part of the city wall. Nowhere about the church is there a tinge of French. In fact, as Street remarks, San Pére de Galligáns is the earliest example of the Lombard Romanesque type in Spain. Its main door deserves particular attention. Its deep reveals are set back in a series of five steps, and the second and fourth arches are carried on columns that are fluted vertically and spirally respectively, and whose capitals show a curious procession of conventionalized beasts. The outermost toothed band has a rugged harmony with the time-worn, fortress-like walls. Above is the wheel window with ornamental stone spokes and little arches connecting them. In fact, this door, like the Saint's name, suggests Ireland, for its exquisite low-relief ornament is very like the early Celtic bits found in that country.

The cloister here is now a provincial museum and resembles the beautiful enclosure at the Cathedral; for although the present Cathedral is Gothic, its cloisters are Romanesque, being the remains of an earlier Cathedral destroyed by the Moors. Deserted now, and overgrown with weeds and shut in from every sound of the village below, these cloisters have a picturesque melancholy about them—less stern and more appealing than deserted cloisters back in grim Castile. Their architectural interest lies mainly in the lovely coupled columns and the piers that carry the rounded arches. Their capitals show a naïve mingling of animal and vegetable life carved with a delicacy almost equal to the cloisters of Tarragona. The every-so-often interruption of columns in the little arcades by piers is amusing—a juxtaposition of massiveness and lightness. The Cathedral itself does not come within the scope of this article, but it contains a celebrated piece of Romanesque tapestry representing the Creation. This is probably Tenth Century weaving, and the arrangement of the subject is not unlike the "Creation" mosaics in St. Mark's, Venice.

Near San Pére de Galligáns is the church of San Feliu, built on the very holy spot where St. Felix and three hundred other early Christians were mar-

tyred. For a building as late as this, 1392, there is a surprising amount of Romanesque for, simultaneously, nearby Barcelona was erecting her full-blown Gothic Cathedral. The explanation is that Gerona, still a bone of controversy,



THE INTERIOR OF TARRAGONA OWES ITS MAJESTY TO ITS VAST PROPORTIONS WHICH ARE LITTLE DISTURBED BY DETAIL.











Capital in the Cloisters.

Detail of Capital.

Reveal of Cloister Doorway.

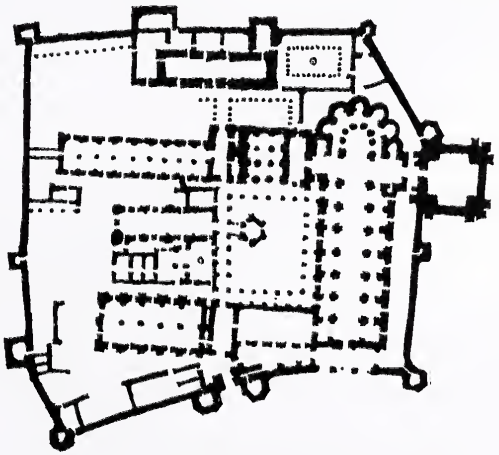
"Burial of the Cats."

The "Butcher Shop."

CAPITALS AT TARRAGONA.

needed fortress churches with massive unpierced walls like at Avila. San Feliu is the last of this type built in Spain.

Finally, in our quest of Romanesque comes Tarragona, about as far south from Barcelona as Gerona is north. The railroad skirts a fascinating bit of coast at the very edge of the deep blue Mediterranean, and gives one, at the last minute, almost as good a view of the perfectly curving harbor as if one had come by boat. The color around Tarragona is wonderful—on the one side the intense blue and green sea broken by glittering sunshine, on the other, stretches of hills soft gray green with olive trees, or purple with grapes and figs. The ancient city (it once belonged to the Phoenicians) is on a rocky hill, and still surrounded on three sides by an imposing and gigantic Roman wall, built on prehistoric or "Cyclopean" foundations. On the highest point of the hill, some five hundred and fifty feet above the sea, rises the Cathedral.



PLAN OF THE ROYAL MONASTERY OF POBLET.

Of the countless temples and other monuments erected when Tarragona was the capital of Roman Spain and had a population of nearly a million, but little remains. The Moors, who were always vandals when they needed building material, pulled down during their four centuries of occupation almost every vestige of Roman civilization, except the walls and the aqueduct. Since the Reconquest from the Moors Tarragona's bishop has shared with Toledo's the title of Primate of Spain, and so the Cathedral is, owing to its Episcopal dignity, in excellent preservation.

It is a brilliant Twelfth Century example. The exterior, as far as one can make out from the houses that hem it in, seems to be a mass of unfinished projects that somehow combine to make a composition of unrivaled freedom, sparkling with exquisite color. Whether regarded as of late Romanesque, Transitional, or Early Pointed style, it is wonderfully consistent in its variations. Nothing is markedly out of its period. Most arches are round; where they are pointed it is because the point was decided on after the building was started, or else they happen to belong to the latest part of the work. How harmoniously Catalan builders could use the two forms is shown in the beautiful cloisters where the structural arch is pointed while the little subdivisions are round-headed and exquisitely ornamented by the same arrangement as the plainer ones at Veruela. Again, on the fine west façade the two different arches are close neighbors, for the fine central door is Gothic and is flanked on each side by a Romanesque one. In fact, the whole exterior is a felicitous assembling of uncontemporaneous features, with Romanesque predominating at the eastern end, where each of the five apses is roofed by a semi-dome. As it was customary in Romanesque times to build the eastern or altar end first, this was nearly finished before Gothic-looking parts were commenced. The large central apse has a particularly early flavor, lighted as it is by two rows of round-headed windows and around its top a rich projecting corbel table. The west side shows at a glance its later construction, and presents the mixture of styles mentioned above—doors leading into the aisles round-arched and the one leading to the nave pointed. Above the south aisle doorway is a very early Romanesque



THE RUINS OF THE ROYAL CISTERCIAN MONASTERY OF POBLET, FROM WITHIN THE OUTER WALLS.

relief of Our Lord entering Jerusalem. The wooden doors themselves are Gothic diapered with iron plates and fitted with magnificent wrought iron knockers of Sixteenth Century Catalan workmanship. All this west front has taken on a deep golden tone, like the stonework of Salamanca. Of the great tower only the lower stages are Romanesque, the octagonal steeple having



THE NEGLECTED ROMANESQUE CLOISTERS OF GERONA CATHEDRAL.



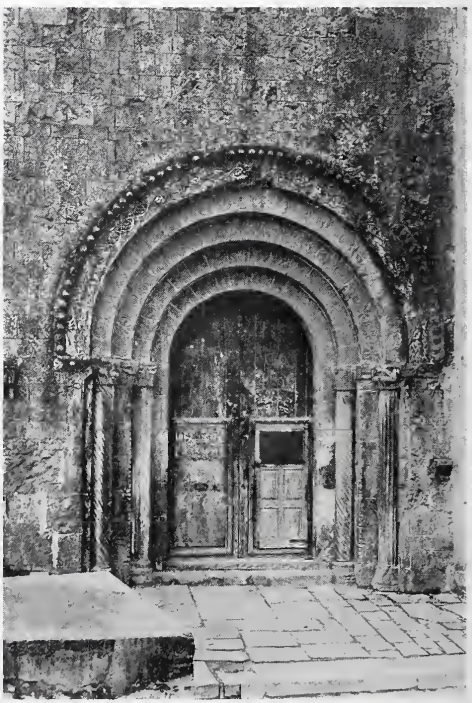
RUINED CLOISTER AT POBLET.



CLUSTER OF COLUMNS AT A CORNER IN GERONA CLOISTERS.

been built with the main Gothic portal. The interior of Terragona Cathedral produces an effect of great solemnity and majesty and this without any recourse to Gothic gloom, for it is full of light. It is an effect produced by wonderful proportions and scale. The plan is cruciform with nave and aisles of three bays, transepts, a large lantern, three apses corresponding to nave and aisles, and in addition, an apse on the east side of each transept. All the main arches are slightly pointed, but the transepts are lighted by a round-headed window in each bay. Undoubtedly the nave also had round-headed windows in the beginning, before the large three-light clerestory pointed ones were pierced. There are fine rose windows in the transepts and a great traceried circle in the west end (made in 1131) all of them containing fine glass. The nave piers are composite; that is, the main arches spring from coupled half-columns, while the quadripartite groining springs from columns which run up between them at the corners of the pier. Nothing could well be simpler than these massive coupled columns, nor more graceful than the slender single one. Altogether, there are fourteen piers supporting the roof. They are thirty-five feet in circumference with their bases broken by four seats, one in each corner; these making in contour an agreeable line that breaks up the severity of the base. All the piers are capped with square Romanesque capitals whose delicate carving is a remarkable contrast to the unadorned massiveness of the mighty piles and arches. Street was highly enthusiastic over Tarragona Cathedral, and in classifying it he remarks that if the capitals were plain it would be called an early pointed building, while being carved gives it a Romanesque look.

But impressive though the interior is, it will always be the cloisters that one will like best. The court is a beautiful garden, with date palms, fig-trees and oleanders crowding each other in semi-tropical profusion. Then, too, the gentle



THE BEAUTIFUL DOORWAY OF SAN PERE DE GALLIGANS, GERONA.



A SURREPTITIOUS PHOTOGRAPH TAKEN IN THE FORTRESS OF LERIDA.

old sacristan is part of the garden and one will always remember how he loves his flowers, and how he chuckles when explaining the humorous carvings of the cloister caps—the company of rats, for instance, burying some supposedly dead cats who suddenly revive and spring upon their "undertakers." He also loves the story of Noah and will never cease puzzling how "all those people and animals are to get into that very, very small ark." And in the Descent from the Cross, where one of the characters is pulling the cruel nails from the Saviour's hands with pincers twice the size of his own body, the sacristan is again mildly amused; nor does the visitor ever fail to find the cloisters a museum of quaint conceits excellently carved in that peculiar sort of primitiveness that no other period equaled. It reaches its best in the door leading into the cloisters out of the north aisle of the church—a door round-arched with a series of heavy mouldings following the contour and four engaged shafts in each jamb and a central dividing shaft supporting a huge lintel. In the tympanum above is Our Lord with the emblems of the Four Evangelists. It is all of marble and, according to the sacristan, was originally in the west façade where the fine Gothic door is now. The marble in the exposed columns of the cloister has taken on a deep golden hue, but this more protected door has turned that exquisite illusive sort of sea-green that one sees in the early Romanesque churches of Ravenna. Marble abounded around Tarragona and so was freely used. The three richly moulded round arches of each bay of the



DETAIL OF THE CAPITAL AT LERIDA.

cloister, the two round windows above filled with thin slabs of alabaster richly traced in arabesques, and the whole enclosed in a great pointed arch make this part of Tarragona a fascinating architectural compromise.

Tarragona Cathedral owns some rich furnishings in the way of choir stalls, retablos, iron screens and lanterns, carved pulpits, and tapestries. These last are magnificent Flemish examples and are hung around the walls and columns to do honor to Saint Tecla, Tarragona's patroness, every twenty-third of September. Only then and on the Octave of Corpus can these be seen. Hung thus, and filled with the sensuous music and incense and color of the robed procession. Tarragona's vast cathedral yields to no full-blown Gothic one in majesty and impressiveness.

Some thirty miles northwest of Tarragona and easily accesible, lies Poblet, the most famous Cistercian monastery on Spanish soil. It was widely known as the burial place of the early Kings of Aragon, but as it was plundered and partly destroyed by the Liberalists in 1835, there is not much left to tell the tale of its once fabulous wealth, but what there is deserves a visit. It has lately been declared a national monument, and the ruins put in sufficient repair to keep them from toppling. Some parts—the massive outer wall within which is another with an enormous gate flanked by two martial towers, and the severely plain early pointed church with its dome and its beautiful cloisters—are still sufficiently intact to be studied. Like Veruela, it obeyed all St. Bernard's mandates as to unembellished capitals, etc., and is therefore an interesting contrast to the freer ornament at Tarragona. Unlike Veruela, it is *not* Romanesque, for it is a much later building, when Cistercian friars had learned the new or pointed style. But though they set this example to the province, Tarragona was commenced a half century later by Catalonians—mostly laymen, in Romanesque. But there is enough of the Transitional about Poblet to make it worth a visit. From this despoiled and deserted mass of grey stone one is glad to come back again to Tarragona, where the splendid cathedral still stands firm against time and wars, a monument to Catalan genius of the Twelfth Century, and the finest efflorescence of Romanesque in Spain.

Editor's Note.—Castile and Leon were studied in the issue for April, 1912.



EARLY ROMANESQUE TOMB AT LAS HUELGAS SHOWING STRONG BYZANTINE INFLUENCE.

THE DEVELOPMENT OF A GREAT CITY

By OTTO WAGNER

TOGETHER WITH AN APPRECIATION OF THE AUTHOR

By A. D. F. HAMLIN



PROFESSOR OTTO WAGNER, Imperial-Royal Surveyor-in-Chief of Buildings for Austria, and since 1894 Professor of Architecture in the Imperial Academy of Fine Arts at Vienna, is the unquestioned head and leader of his profession in the Austro-Hungarian Empire and one of the most fertile and original of modern architectural designers. He was born July 13, 1841, at Pentzling, a suburb of Vienna, and after a course of preparatory studies in the Ober Gymnasium of Kremsmünster, received his professional education in the Vienna Polytechnic, the Berlin Bau-Akademie and the Academy of Arts at Vienna. The earlier years of his professional career were spent in the office of Siccardsburg and Van der Nüll, the architects of the Opera House and of many other important buildings. From 1862, when he won the first prize for the "Kursalon" in the Vienna City Park.* until his appointment in 1894 as Professor of Architecture in the Imperial Academy of Fine Arts, he was engaged in independent practice of steadily increasing volume and importance—the miscellaneous practice of a successful architect in a great city: but it is in these last fifteen years that he has won the pre-eminent position he now occupies. His appointment to the Kunst-Akademie, not only gave him a new outlet for his artistic activity and an occasion for formulating and giving to the world, both in print and in the more intimate converse of the class-room and studio, his thoughts on architecture, but also a new stimulus and direction to his creative activity. The result is seen in a series of remarkable buildings in Vienna and neighborhood, in an equally remarkable portfolio of "projects" or unexecuted designs from his office, and in a number of pamphlets and articles in which he set forth his ideas and conceptions of the art of which he was and is so enthusiastic a devotee. Every one of these productions bears the impress of a remarkable personality. They are characterized by a striking originality and an exuberant imagination, held in bounds by a cultivated taste and the discipline of a thorough training in construction. For it is worth noting that during his years in the office of Siccardsburg and Van der Nüll his most intimate association was with the first-named, who was the practical man, the structural designer of the firm, rather than with Van der Nüll, who was the artist.

As every one knows, the "Art Nouveau" movement was just beginning to make itself felt in 1894 or soon after. In Vienna its advocates took to themselves the name of Secessionists, and this movement away from tradition and in favor of freer individual expression in design rapidly acquired strength and spread through Austria. It produced much that was merely eccentric and bizarre and some things that reached the limit of extravagance. Professor Wagner, with his sound training and cultivated taste knew how to avoid the extravagances, while he hailed with enthusiasm and appropriated the merits of the new movement. A thoroughly scientific constructor, he designed nothing that does not appear to be rationally and soundly put together; and a certain dignity and simplicity of mass, silhouette and proportion characterizes all his works. The details of classic architecture he uses sparingly and as if they were plastic to his touch;

*The prize did not carry with it the execution of the project.

he is not afraid of broad flat surfaces and ample walls. His details in general are highly original; it is in regard to these that his works offer the most frequent opportunity for criticism. Some will welcome their originality, their independence of all traditional precedents; others will consider many of them freakish and unwarranted, if adequate warrant exists only when and where the new and original feature is a manifest improvement upon the traditional feature which it is intended to replace. Thus the remarkable church at the Steinhof, herewith illustrated, will shock some and please others, but no one will, I think, deny the high artistic quality of the weir and gates at Mundorf shown in another illustration, or of the admirable elevated structure of the Vienna City Railway, which so puts to shame everything of like purpose thus far erected in the United States.

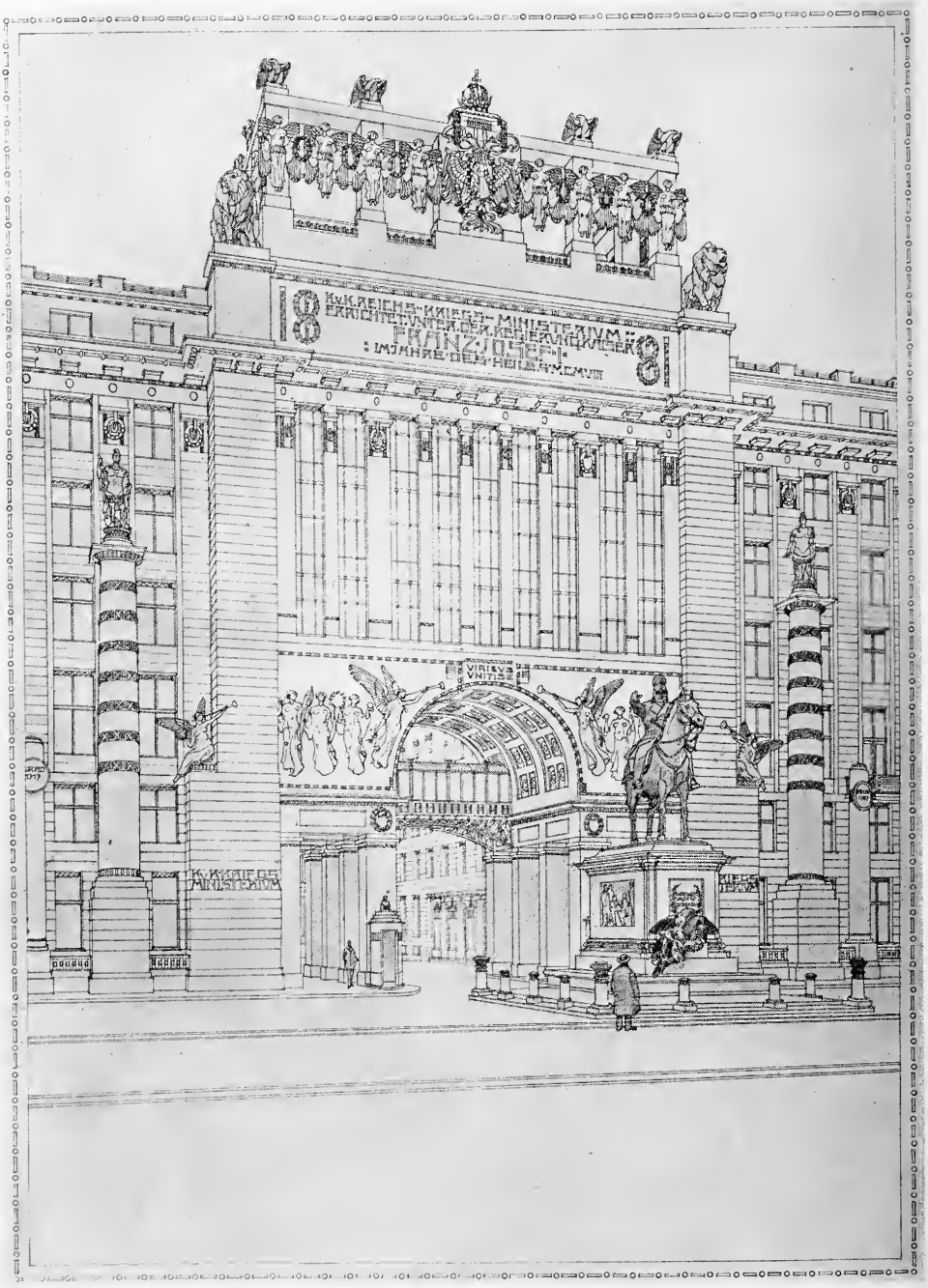
Professor Wagner's fame rests in large measure upon his studies and teachings relative to civic design. When, in 1894, shortly after his appointment to the Kunst-Akademie I had the pleasure of visiting him at that institution, he put into my hands a *brochure* he had recently published, on the true principles that should control the improvement and development of his own city. It had been prepared to accompany his competitive design for the improvement of the city plan and bore as its title the motto inscribed on the competitive drawings: *"Artis sola domina necessitas"*—"Art knows no mistress but necessity." His design had won the first prize, and this pamphlet embodied the artistic creed on which that design was based.

Professor Wagner was the President of the Eighth International Congress of Architects at Vienna in 1905 and has been the recipient of numerous honors from his own and other countries. His seventieth birthday, last July, was the occasion of an impressive tribute of admiration and affection from his fellow architects in Austria. He was invited to participate in a proposed congress on city planning in New York in 1910. This invitation was in part the occasion of Professor Wagner's writing the article which follows, and which will be read with interest by every student of the problem of city planning. It is interesting as much for what it contains that is inapplicable to American problems, as for what is of universal significance. It goes so far in the direction of what is sometimes called municipal paternalism, sometimes state socialism, as almost to take away an American's breath. It is based on conditions which can only exist under a strongly-centralized, not to say imperial, government. The topographical conditions under which alone the particular scheme it sets forth is possible exist in Vienna, but hardly in most American cities, and not at all in New York or any maritime city. It is doubtful whether in this country we shall ever—or at any rate within the lifetime of any now living who read this paper—reach the situation in which a municipality will expropriate the entire outlying territory for development on preconceived lines. And yet in the propositions laid down by the Austrian professor there is abundant food for thought for us Americans. The principle of excess condemnation, so blindly rejected by the electorate of New York State at the last election, is here shown clearly to be fundamental to any thoroughgoing and extensive civic improvement. Above all, it seems to me, this paper exhibits the importance of large views, of the long look ahead, of taking under rational control many forces and resources which we in America squander by abandoning them to chance or to speculation. And it emphasizes the fundamental importance of carefully planned thoroughfares and transit facilities, laid out ahead of the need, not long after the need has become acute; for public service rather than for speculative profit; facilities which shall guide urban development into favorable conditions and not follow the haphazard growth of ragged and unrelated fringes of speculative suburbs.

Perhaps fifty years hence Professor Wagner's propositions will appear less fantastic and chimerical to Americans than they will to some who read them for the first time today.



Otto Wagner



PROJECT—PORTAL OF AN IMPERIAL WAR MUSEUM. OTTO WAGNER, ARCHITECT.



DAM AND GATES AT NUNDORF.

FOREWORD

A FLATTERING INVITATION which came to the author in March, 1910, from Professor A. D. Hamlin of Columbia University, conveyed the request to prepare a paper for an international congress on municipal art, which it was proposed to hold in New York under the patronage of the City and State. This gave the first impulse to the preparation of these pages; while the repeated urgings of another committee to attend the city-planning exhibition in Berlin in 1910, and later the conferences on the Vienna Building Ordinance, finally confirmed the author's desire to give to the public his views on the subject of city planning; the more so in view of the contention of the Association of Austrian Architects that the Vienna conferences had failed to give adequate consideration to the artistic side of their problem as well as to the important questions of street-circulation and building lines.

This paper contains certain propositions which the author feels himself bound to present because thus far all the exhibitions, treatises and addresses on this subject have failed to produce definite results.

The considerations about to be presented apply to no one city, but to large cities in general, although there may be particular cities which stand out prominently by reason of their pressing need for the solution of the problems of future expansion as well as of the improvement of present conditions. What follows represents neither the radicalism of the iconoclast nor the wail of the traditionalist on the subject of city-planning, but proceeds from the fundamental assumption that the most important element in the solution of any such problem is the practical fulfilment of a definite purpose, and that art must impress its stamp upon whatever may result from the accomplishment of this purpose.

Since our manner of life, our activities and our technical and scientific achievements are different from what they were a thousand years ago or even a short time since, and are the results of constant development, Art must give expression to the conditions of our own time. Art must therefore conform its city plan to the needs of the mankind of today.

Those favorite catchwords—"the art of the home," "co-operation in city planning," "sentiment in city-planning," etc., taken in the sense in which they are used by people who know and judge Art only from text books, are empty phrases to which such people cling because they are destitute of ideas on the real problem of the city plan. Only the true architect can distinguish between what is old and beautiful, and what is merely old; he will favor neither the wanton destruction of what is beautiful nor the copying of the antique; nor will he care for the much-lauded "embellishment" of a city; all architectural extravagance is foreign to his nature.

Our democratic existence, in which the

masses feel the pressure of the necessity for economy in their methods of living, and call for homes at once sanitary and cheap, has resulted in a certain uniformity in our dwelling houses. This tendency will therefore find expression in the plan of the future city. Individual dwellings of like cubical contents and plan are cheaper in first cost and rental price if combined in houses of many stories than in houses of few; the cost of the lot, of foundations and of roof entering into account but once. And since the proverb "Time is money" is truer today than ever before, the increase in height of residential and office buildings in the city's center to seven or eight stories, indeed, to skyscrapers (if the city permits) is a natural development.

In any given city the number of dwelling houses must greatly exceed that of its public buildings; and their contiguous multiplication inevitably results in long and uniform block-façades. But our modern art has turned these to monumental account by the plotting of wide streets, and by the introduction of picturesque interruptions of their monotony is able to give them their full artistic effect. There can be no doubt that when Art rightly handles such cases all talk about a "city pattern" is beside the mark. This kind of talk is possible only when Art is left out of the question. Unfortunately the effort to avoid the uniformity of dwelling-house types which has resulted from practical and economic considerations, has led to an altogether objectionable and artistically worthless overloading of the exteriors of these utilitarian structures with purposeless features, meaningless projections, turrets, gables, columns and ornament; although wide streets serve to mitigate somewhat the effect of these ungainly absurdities.

Quite as unjustifiable and as objectionable from an artistic viewpoint are intentional but unwarranted curves and irregularities in the lay-out of streets and squares, intended solely to produce artificially picturesque vistas. Every large city possesses of necessity a greater or smaller number of winding and irregular streets; but these have artistic warrant only when they result naturally from conditions of circulation, traffic, topography or the like.

The characteristic impression produced by a city results from its existing or inherent beauty and its potential beauty. The city's general "physiognomy" is the most important consideration in its plan. Upon it depends the success of the effort to make the first impression as pleasing as possible. This impression is furthermore dependent on the pulsating life of the city as a whole. With regard to this it must be remembered as a fundamental fact that the great majority of the community, including, of course, visitors to the city (we are dealing now with the general mass) are quite ignorant of artistic matters. Therefore Art, if she would arouse the interest of and give satisfaction to the average man, must seize upon every opportunity that gives promise of producing a favorable impression. Industry, trade, fashion, taste, comfort, luxury, all provide media for artistic expression, and must all be availed of to attract the attention of the average man towards Art, so that he may be disposed to bestow favorable judgment upon works of art. The uninterrupted vista of a main thoroughfare flanked by fine stores displaying the artistic products of the city and of the country to the view of the crowds hurrying by; other streets through which one may stroll for an outing and regale himself to the extent of his pocketbook; a sufficient number of good restaurants, where one may find both satisfaction and relaxation; open squares, where public monuments and buildings in artistic settings present themselves to the gaze of the beholder, and many other like factors not here enumerated—such are the things that give to a city its characteristic physiognomy. To these may be added an efficient system of transportation, a faultless street-cleaning department, living accommodations provided with every comfort and suited to every social grade—all these are conditioning factors of a favorable impression on the artistically indifferent average man. In the application of a criterion of excellence to these things beauty, that is, artistic quality, is the deciding factor; this alone makes

it possible to produce a satisfactory first impression on citizen and stranger alike. Thus impressed, both citizen and stranger will be better disposed towards the city; less moved by a hypocritical pretense of art-interest to martyrize themselves "doing" the art treasures and museums of the town.

The more completely a city fulfils its practical ends, the better does it minister to the pleasures of its inhabitants; and the greater the part played by Art in this ministry, the more beautiful the city. Neatness and scrupulous cleanliness go hand in hand with Art; city governments please take notice!

One chance for the influence of Art on the development of the city, and hence upon its future aspect, is well-nigh closed in these days; not by the pressure of economy, but by the complete indifference of the masses to artistic work, and the consequent lack of artistic creativeness. The masses have been for ages accustomed to leave all matters of art to the ruling classes, and they overlook the fact that the autonomous community having now come into power, it devolves upon it to provide the necessary artistic initiative.

On the extreme periphery of a great city private boundaries, paths, water courses, small differences of level, a tree, even a manure pile, may determine the later location of particular structures. These in turn influence the position of roads, squares, etc., so that at last out of these chance beginnings the permanent plan of the city grows up.

It will never do, however, to elevate such things to the plane of determining influences in artistic development. For if they were so, what would become of our hopes and efforts for the ideal city plan, the carefully thought out placing of public buildings, of parks, of vistas? What would become of the scientific layout of circulation, the practical and economically necessary straight boundaries for building lots, and last of all, the control of building lines, so essential in any great city?

From this it may be seen that the forming of the city cannot be left to chance,



THE DEVELOPMENT OF A GREAT CITY.
As Proposed by Otto Wagner, Architect.

but must be founded on well-weighed considerations. To determine these considerations and point the way by which this goal is to be reached is the aim of this paper.

There can be no doubt of the fact that the majority of mankind prefer living in a great city to living in a small one or in the country. A large proportion of the inhabitants of a great city are forced to do this by their occupations. Profit, social position, comfort, luxury, low death rate, the presence of all the spiritual and physical necessities of life, possibilities both good and evil of recreation, and lastly Art, are all factors in this tendency. Most of the forces which favor the growth of great cities are operating with constantly increasing energy.

Economic forces are potent in all this. It should excite no surprise that city councils favor the growth of large cities.* The exertion of the influence of every city administrator to encourage the influx of inhabitants and strangers is therefore a matter of course.

REGULATION OF THE CITY PLAN

THE SKELETON OF A GREAT CITY is formed by its lines of traffic, by its rivers, lakes or bays, its topography and like permanent conditions. The regulation or systematizing of the city plan can, as I have intimated, be carried out by following a definite principle and scheme. This scheme falls naturally in to two divisions:

1. The regulation of the old, already existing part, and
2. The regulation of future development and expansion.

The regulation of the old part is limited to maintaining its already existing beauty and making use of it advantageously in the city plan.

Conditions of traffic, sanitary requirements, the circumstance that so much that is beautiful is in private possession, that many a work has reached the limit of age and usefulness, and finally social and economic relations—all these demand a special consideration of each individual case in the regulation of the old part.

On these grounds the advance determination of future building lines in the existing parts of the city, however greatly to be desired, is scarcely practicable. It goes without saying, however, that in the case of new buildings or remodelings the city administration should avail itself to the utmost of any artistic advantages from their proximity to existing elements of beauty. But it is the new and undeveloped quarters that can and must be systematized, if coming events are not to bring the city authorities face to face with the unsurmountable "too late." Regulation on a large scale of the housing and living conditions of the future inhabitants, the possibility of conveniences and appliances at present unknown, the provision of "safety valves" for expansion, last and not least the development of the city's growth along lines of beauty, must all be taken into account in the scheme.

How important, how fraught with terrible responsibility this duty of foresight in regard to future conditions of living is, may be gathered from the fact that great cities double in size in from thirty to fifty years. Hence their governing bodies are forced to take care that houses, public buildings, main streets, sanitary arrangements, etc., shall be properly located in advance; otherwise, instead of the hoped-for ideal, a chaos would result, which could be restored to order only at enormous expense.

We may consider it axiomatic that the administration of a great city demands its division into wards. The situation and boundaries of the wards or boroughs form the foundation of the systematized regulation of the great city.

While it may be wise and proper to lay out each ward or borough with careful consideration of its schools, business cen-

*"Es darf daher nicht Wunder nehmen dass die Stadtvertretungen das Anwachsen der Grossstädte fördern." I take this to mean that the representatives of every city desire the increase and expansion of their own city to metropolitan dimensions. (Witness the "Million Clubs" of certain sizable American cities).—Translator.

ters, industrial requirements and domestic conditions, there is no use in planning entire wards for particular classes or purposes; since workmen, employees of high and low rank, officials, and so on, will and must make their homes in their own particular wards. Certain things must however be common to all wards to a greater or less degree; for example, parks, (public) gardens, playgrounds, schools, churches, traffic routes, markets, municipal buildings (courts, police buildings, building department, borough hall), department stores, centers for the handling of inward and outward bound traffic, garages, morgues, even theaters, special museums, libraries, barracks, asylums, workshops, public halls, etc.—this on the ground that, since there are a great number of public buildings whose usefulness can scarcely be determined for more than a century in advance, future buildings for the same or like purposes can only be provided as new wards spring into being.

Naturally the wards will be arranged circularly in zones around the center of the city; whether the zones are closed circles or segments is of no consequence. The distance from the center of the city will always be the determining factor in regard to reaching the permissible building limits or the beginning of rural suburbs.

The division of the wards into zones, in most cases naturally arises from the discharge or out-reaching of the streets that radiate from the city's center.

The maximum population of a ward may be taken experimentally at a hundred to a hundred and fifty thousand. It need hardly be mentioned that, until this limit is reached, two or even three such boroughs may have one administrative center.

A population of from 100,000 to 150,000 corresponds to an area of from 500 to 1,000 hectares,* if the houses are built to the allowed limit of height. The idea of surrounding the city center with zonal streets from two to three kilometers apart, and of laying out the wards in the resulting zones, is therefore in accord with this design.

In any systematic lay-out special care must be taken that the chief radial streets have a sufficient width to meet all future demands of traffic, while the zonal streets should be planned so as to suffice for unlooked for and unknown requirements. The width of the zonal streets may be set at from 80 to 100 meters (262-328 feet). The laying out of zonal streets in the already built-up portion of the city will present great difficulty, but they can be made in part to coincide with streets already existing, and need not measure up to the above mentioned dimensions.

Since, as will be shown later, the separate wards or boroughs will be developed at exact intervals fixed in advance according to a well laid plan, and thus form a group of small cities around a center, it seems more advisable to give each separate division its own open spaces, such as parks, public gardens and playgrounds, than to plan a belt of woods and meadows. Such a girdling of the city forms a hard and fast limitation that is certainly to be avoided. In the light of our present experience the expansion of a city must be unlimited. Moreover, such a belt would be spoiled by the inevitable building along the radial streets that must of necessity intersect it, and thus would fail of its purpose. The system of city building set forth in this article is illustrated by two plans and a bird's-eye view. The first of these plans presents as an example the future Vienna with its zones and wards extended in every direction to the limit of a radius of 14 kilometers (8¾ miles). It is however needless to say that the length of these radii can be increased at any time, and thus the addition of new zonal streets is unlimited.

A second plan shows the proposed development of the future twenty-second ward of Vienna as it would be when completely built up. The height of the buildings is limited to 23 meters, exclusive of roof-story or attic, and the minimum width of streets is 23 meters (75 feet).

By applying the propositions made

*1,300 to 2,600 acres, or about two to four square miles. This is equivalent to a population of from 58 to 77 to the acre.

later in this article, and by systematic planning, it is possible to determine the fundamental arrangement of each division or borough with regard to artistic, mercantile and hygienic considerations before the city administration opens it to development. In this way a series of beautiful and at the same time practically convenient miniature cities will arise. They will present to posterity an uninterrupted plastic history of Art, and thus exclude all mechanical uniformity. A pleasing variety will be presented by such sections as are devoted predominantly to special purposes, such as art centers with their new collections and schools, or university cultural centers with a national library, and so forth.

The lots destined for public buildings in any ward or borough can of course serve other purposes temporarily until the actual construction begins.

Apart from buildings for state and national parliaments, and for great art collections which must be located near the municipal center, and apart from those buildings claimed by the several wards respectively, there will be in every large city many edifices whose location is absolutely determined by topographical conditions, water courses, harbors, local requirements, and so on.

In the same way there will be buildings which are suitable only for particular wards, such as warehouses and factories, the larger workshops, markets, bazaars, etc.; and finally such establishments as must be located at a distance from the city, such as cemeteries, depots, balloon-sheds, barracks, fields for sports of all sorts (including aviation). Cemeteries are, on certain days of the year, so frequented as to tax all means of transportation to the limit, so that it is obviously better to have two or three. Distance in this case counts for nothing, for every large city will soon be in a position to limit the transportation of corpses to railroads, and it seems therefore proper to provide each ward with a mortuary station for this purpose.

It cannot fall within the limits of this article to clear up all questions pertaining to city design, especially that of the grades and levels of particular cities. This, however, is certain: That present way connections must in the future be either elevated above or depressed below the street level, and that present water supply systems cannot be altered. In the same way it can only be suggested here that it is the duty of the city administration to obtain control of all transit facilities.

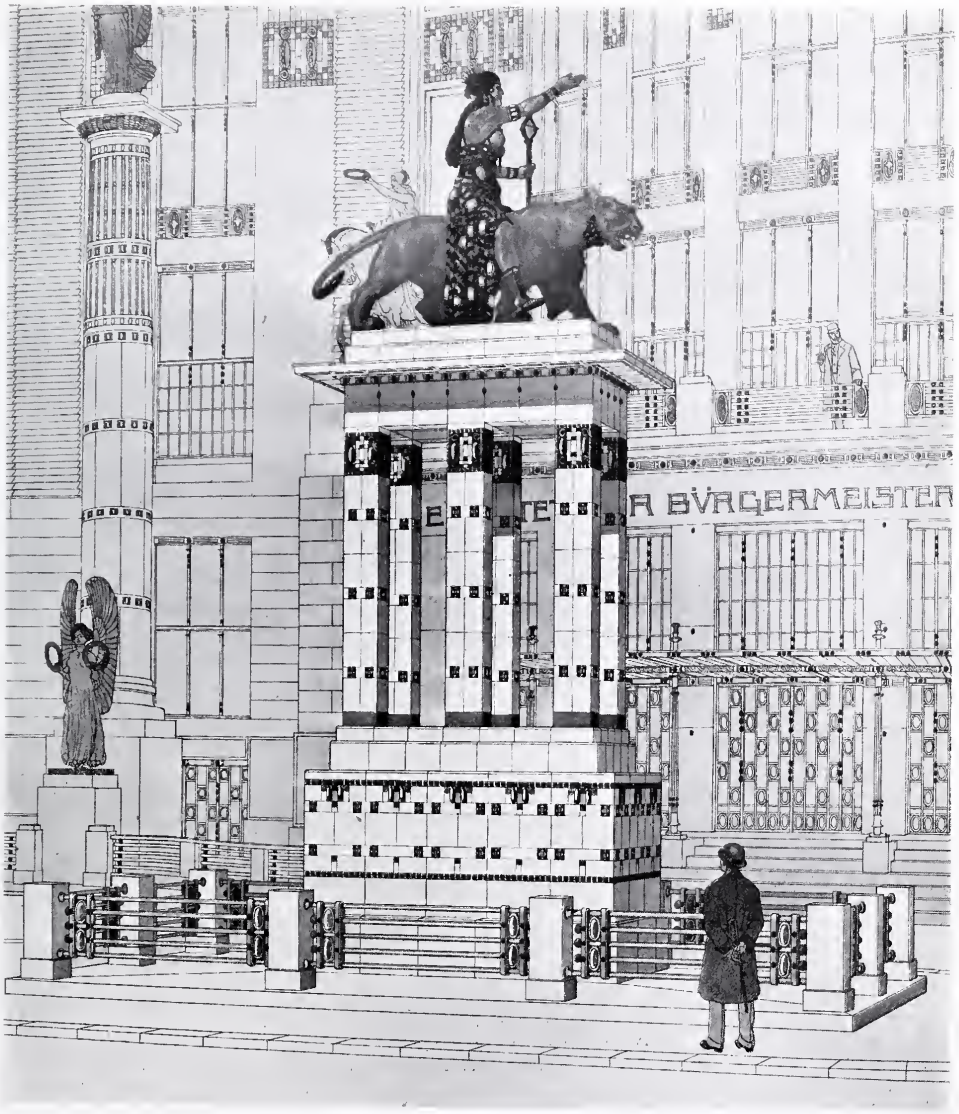
This being granted, rapid transit must be provided for in such manner that there shall be a constant circulation through the zones, and a constant movement to and fro through the radial streets, so that any desired point can be reached with a single change of cars. Elevators should provide the means of connection between elevated, subway and street car lines at points of intersection.

The carrying out of the proposals herein set forth insure to every city, through systematized regulation, an untrammeled development for all time, and the ominous "too late" vanishes from view.

There is one point, however, that must be emphasized in this connection. Art and the Artist must be governing factors, in order that the beauty-destroying influence of the engineer may be forever destroyed, and the power of the vampire, Speculation, which now makes the autonomy of the city almost an illusion, may be reduced to a minimum. The means of realizing this, and the way in which it may be effected are illustrated in the following discussion of the proposals:

ECONOMIC CONSIDERATIONS

If the systematization outlined above, and the desired amelioration of the great city are to be realized, the undertaking demands abundant means. Economy in such an undertaking it not to be thought of, for the best is in this case scarcely sufficient. One might suggest a sort of competition of administrations in relation



"CULTURE": MONUMENT IN FRONT OF KAISER FRANZ-JOSEPH MUNICIPAL MUSEUM.

to the regulation and amelioration of the city plan. The late able mayor of Vienna, Dr. Karl Lueger, pointed the way most clearly, in that under his régime the city took over the ownership and operation of a number of public utilities, such as gas and electric plants, high-pressure water service, street railways and control of burials, from which it received large returns.

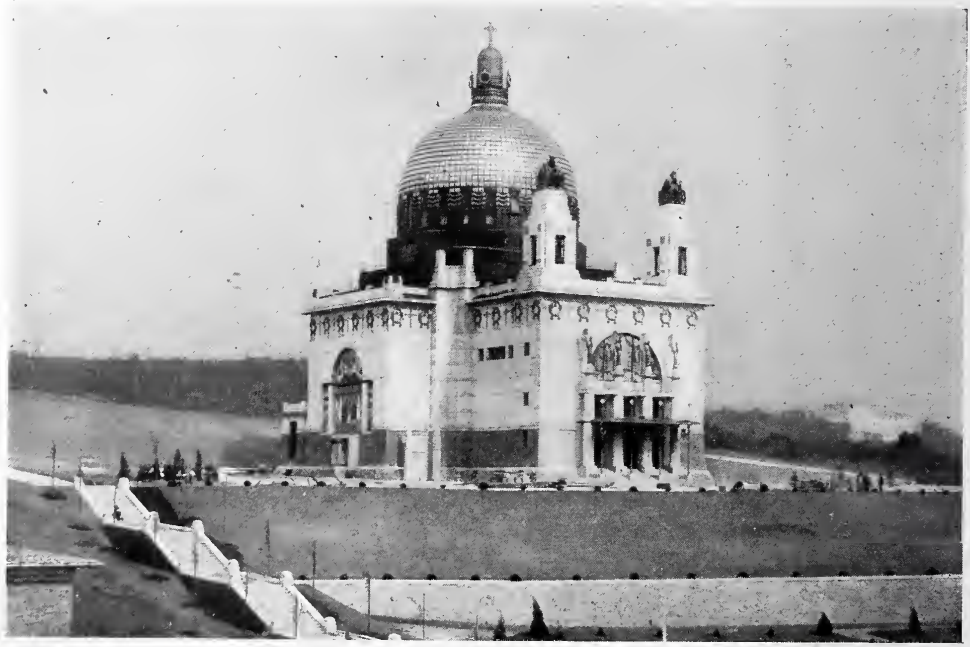
A further resource is suggested in the following remarks:

A continuous increase in land values follows the growth of a large city. It is therefore logical that this increase should accrue to the general weal; that is, to the city. Movements towards this end have made the question of taxes on the increase of land values a living issue, and this tax has already become law in Germany. It is doubtful, however, whether the question can be solved in that way at all, for it is hard to find the right place to apply the lever with success, unless the taxes, as is already the case in Vienna, are to be raised to an enormous figure.

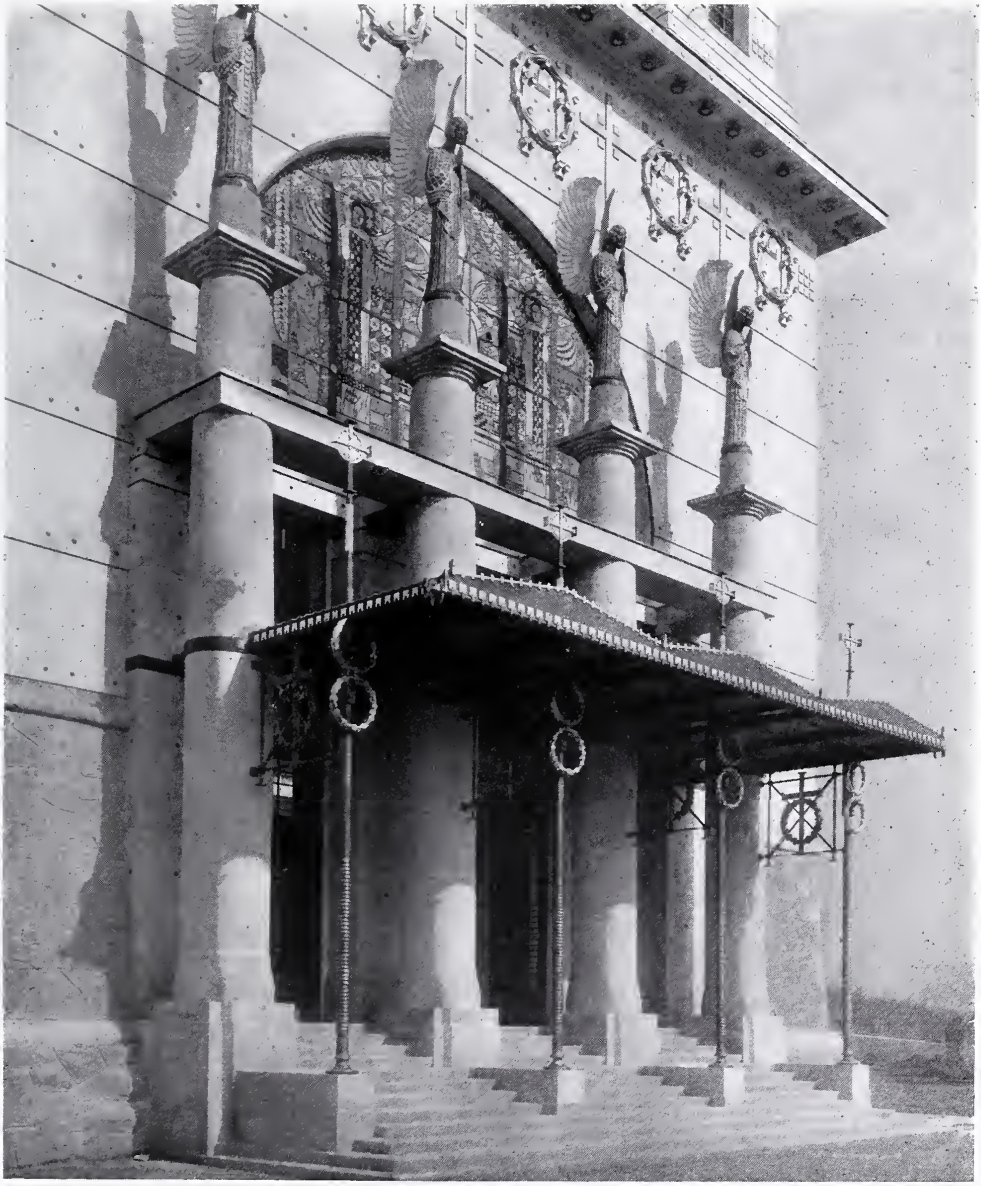
A simple method of attaining this end of raising sufficient funds for the city is offered by the very increase of the city itself, in the city's buying surrounding land which is little or not at all built up, and holding it until it is ready to be built on and incorporated into future zones. It is obvious that this land by being farmed out or leased immediately after its purchase can furnish a sufficient interest on the investment, while at the same time its increase in value will be in favor of the city.

It is certainly to be expected that the value of such lots, even if they at first paid scarcely sufficient interest, will in a short time have increased to such an extent as to far surpass the original investment and its interest, and to bring in a profit amounting even to hundreds of millions.

All the unoccupied land in the neighborhood of a city, it may be fairly assumed, can be obtained at a comparatively low price. The increase of population indicates, however, that a part of this land will have been built up certainly within fifty years, and will therefore have reverted to private ownership again (it is



A CHURCH IN THE STEINHOF.
Otto Wagner, Architect.



ENTRANCE DETAIL, CHURCH IN THE STEINHOF. OTTO WAGNER, ARCHITECT.

assumed that the city has obtained ownership by condemnation). This procedure is followed again and again. It is possible for the city by regulation of prices, allotments, etc., to direct its growth in certain directions, to reserve the necessary public lands in each ward, to limit the present flourishing speculation in real estate, and with the resulting profits to carry out plans for city improvement on a large scale. According to the accompanying illustration, the future twenty-second ward of Vienna has, for example, 5,100,000 square meters;* 50 per cent of this is held for public purposes and hence there remains 2,500,000 square meters (one square mile), which represents, at an increase of only 20 kroner per square meter, a gain of 50,000,000 kroner.

This total may be still further increased, for the city administration is in a position to regulate the building up of the ward in such a way as to encourage apartment houses of many stories, whereby the land values will, of course, increase.

The possibility of maintaining municipal apartment houses and lucrative municipal establishments, such, for example, as city brickyards, is opened up—establishments which will be a further source of revenue to the city. Two things are necessary for the carrying out of such a scheme by the city:

First: a suitable condemnation law, which is the more easily obtained since every city will support a movement for its own development into a metropolis; such a law is moreover the best and surest of tax-reducers.

Second: the creation of a general municipal sinking fund (Stadtwertzuwachsfonds) by which the house may be relieved of the risks and contingencies of protection, profit and safety.

The advantages to be secured for the community by an expropriation law fall naturally into two categories:

I. The expansion of the city.



DWELLING IN THE 13TH WARD, VIENNA.

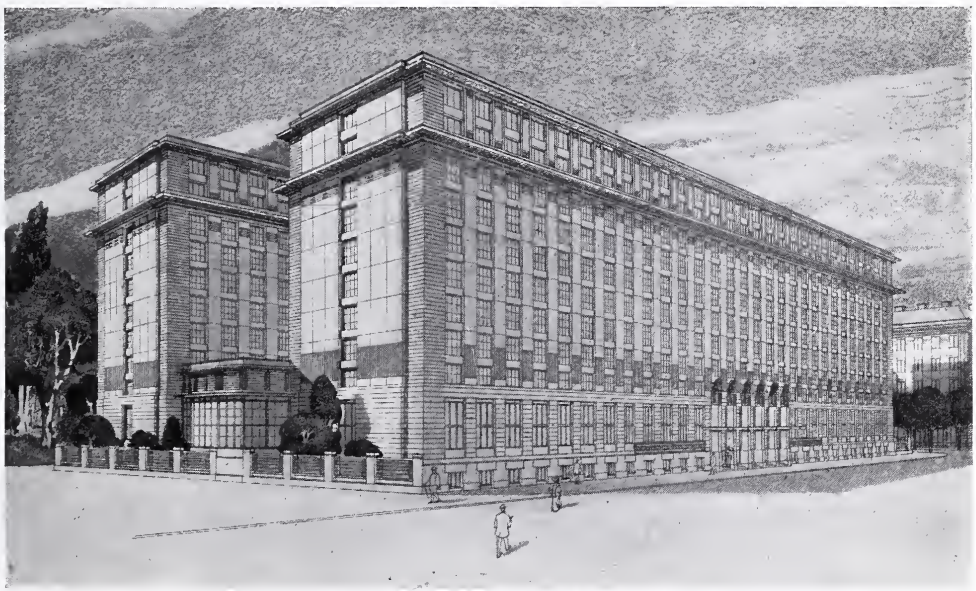
Otto Wagner, Architect.

*510 hectares, about 1,325 acres, or two square miles.

II. The improvement of the existing part.

With the proposed legislation to build on, the city authorities can seriously consider undertaking those projects which are in keeping with the development of the city and are imperiously demanded by a progressive culture.

The greatly increased income will put the city in a position to erect peoples' clubs and dwelling houses, municipal sanatoriums, city warehouses, promenades, fountains, observatories or belvideres, museums, theaters, waterside pavilions, valhallas, etc., in short, things which are now scarcely thought of, but which cannot be omitted from the plan of the future metropolis.



PROJECT FOR A UNIVERSITY LIBRARY IN VIENNA.

Otto Wagner, Architect.

Although the scale of this study is only that of a general sketch, yet it may justly be maintained that in these proposals the means are presented of enabling the city to satisfy the enormous demands of administration, commerce, hygiene and art.

If one examines the plans and the picture presented here (they are not offered as models to be copied), even the layman will be convinced that houses built in city wards thus planned afford good, cheap and sanitary dwellings, and that the further needs and wishes of the city dweller can be fully satisfied. And one must admit also that only in this way is the problem of our future way of living to be solved.

The longed-for detached house in the still more longed-for garden city can never satisfy the popular need, since as a result of the pressure of economy in living expenses, of the increase and decrease in the size of families, of change of occupation and position in life, there must be constant shifting and change in the desires of the masses. The needs which arise from such changing conditions can be satisfied only by rented apartment dwellings, and never by the individual houses.

Last of all, it must be stated clearly and decisively that homes in buildings on city blocks divided into from four to six lots, each block fronting on a garden, square or park, and bounded on three sides by a street 23 meters wide, are in accord with the demands of our progressive culture, are healthy, beautiful, comfortable and cheap, and are better fitted to our demands, than those whose design is based on fundamentally false principles. To

hark back to tradition, to make "expression" or picturesqueness the controlling consideration in designing homes for the man of to-day, is absurd in the light of modern experience. The number of city dwellers who to-day prefer to vanish in the mass as mere numbers on apartment doors is considerably greater than of those who care to hear the daily, "good morning, how are you" from their gossipy neighbors in single houses.

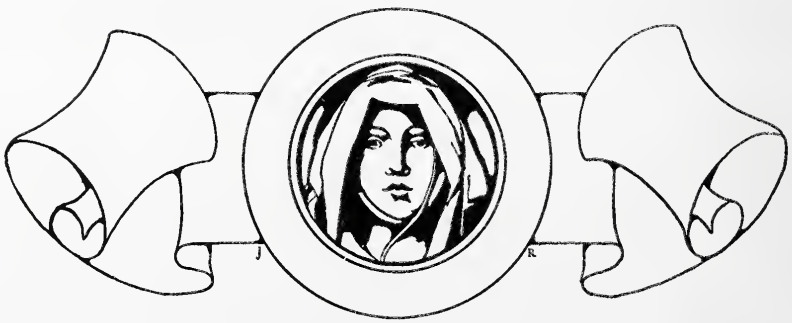
However, it is self-evident that the single dwelling will not vanish from the city plan; its presence, however, will be due to the wishes of the upper ten thousand.

The manner of life which our era has produced, will yet bring to maturity many things of which we can now form scarcely a conception; such as, for example, the movable house, the portable house erected on land leased from the city, and many others.

When it is considered that Vienna, for example, in sixty years, in spite of the most favorable situation, has not produced a city plan of artistic value except Semper's outer Burgplatz (after the removal of the city gate and the remodelling of the castle) and the Schwarzenbergplatz, not altogether unobjectionable (the City Hall and Votive Church squares may be considered failures), while the Ringstrasse owes its existence to a lucky chance; and when one contrasts with this a future, artistic, rational planning and disposition of the several wards brought into systematic relations with each other, the thought must arise even in circles untouched by Art, that without that largeness of conception and breadth of vision suggested by these proposals, and without the constant hand and touch of Art upon every detail, a beautiful city can never be built.

It will not do to leave the expansion of a city to blind chance and artistic impotence as in the past, and to consider artistic efforts as superfluous, or to abandon the development of the city to the most miserable land speculations. The resulting injury to the inhabitants and government of a city is, from a politico-economical point of view, nothing short of colossal. It will continue to grow greater, for the noward march of time will make it ever more and more irreparable.

May the representatives of the people in city governments keep particularly before their eyes the fact that a great city can only fulfil its end—which is to be the satisfying dwelling place of a population counted by millions—when it is a beautiful city, and that this is only to be reached through Art.

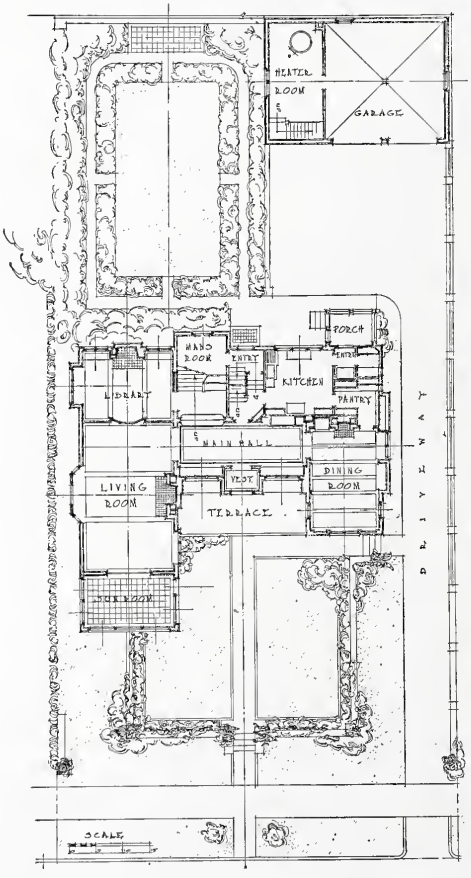




PORTFOLIO
OF
RECENT SVBVRBAN HOVSES

DESIGNED BY
WILLIAM M. KENYON, ARCHITECT,
MINNEAPOLIS.

J. M. ROSÉ



Floor Plan.



Hall.



Sitting Room—Second Story.

RESIDENCE OF WILLIAM M. KENYON, ESQ., MINNEAPOLIS, MINN.

Wm. M. Kenyon, Architect.

The ideals and the variety of the better American Architects receive their highest and fullest expression in the suburban and country house.

In the six houses herewith illustrated by photographs and plans there is a certain local propriety and individual destinction imparted. Each house shows that there is an increasing number of people of moderate means who demand a dwelling with some distinction and propriety of appearance.



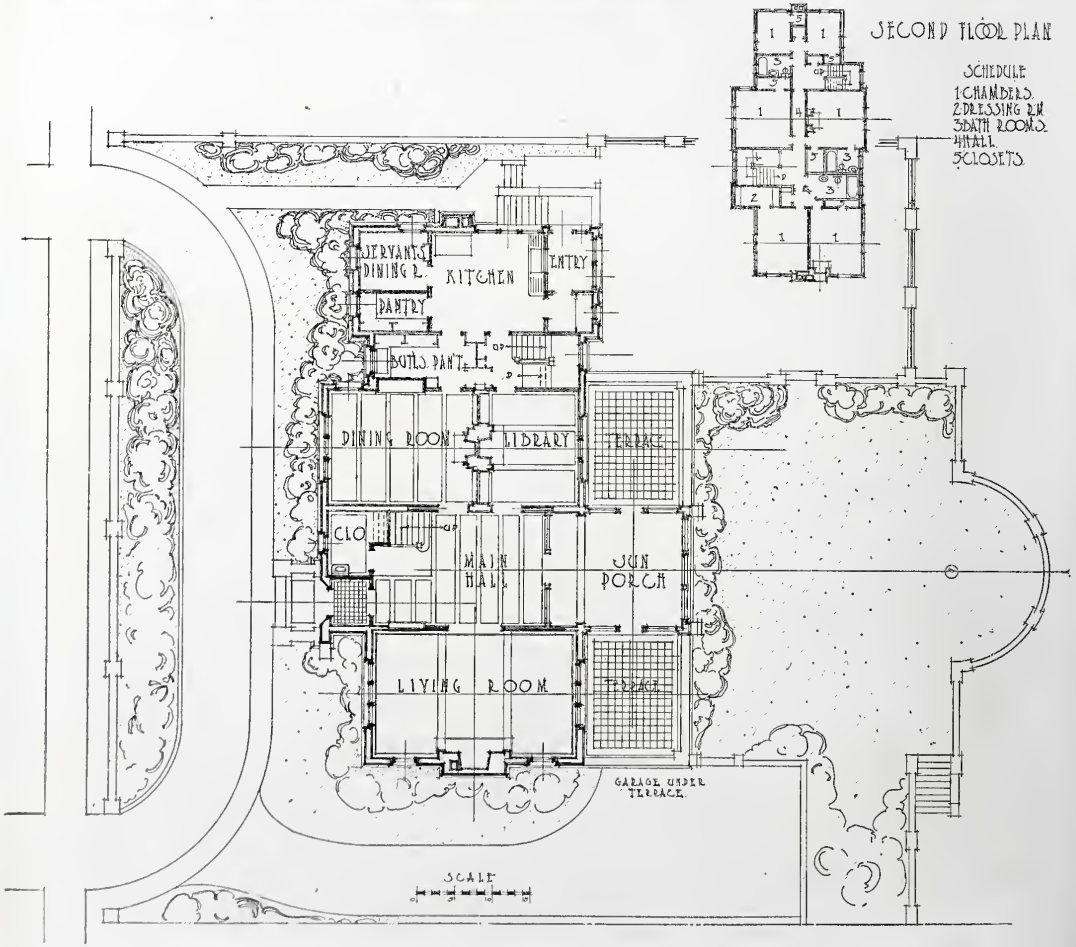
The Library.



THE RESIDENCE OF WILLIAM M. KENYON, ESQ.,
MINNEAPOLIS, MINN. WM. M. KENYON, ARCH'T.



Street Elevation.



Floor Plans.

RESIDENCE OF MRS. WILLIAM DONALDSON.

Minneapolis, Minn. Wm. M. Kenyon, Architect.



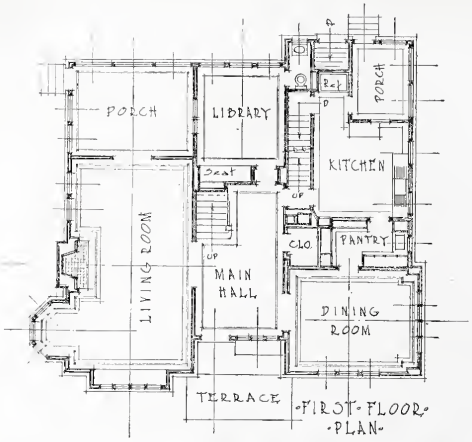
Entrance Detail.



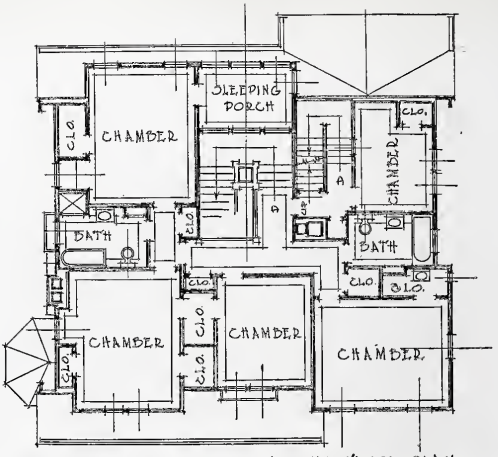
The Hall.

RESIDENCE FOR MRS. WILLIAM DONALDSON.

Minneapolis, Minn. Wm. M. Kenyon, Architect.



·FIRST·FLOOR·PLAN·



·SECOND·FLOOR·PLAN·



Entrance Detail.

RESIDENCE OF DR. A. A. LAW.



RESIDENCE OF DR. A. A. LAW, MINNEAPOLIS, MINN. WILLIAM M. KENYON, ARCHITECT.



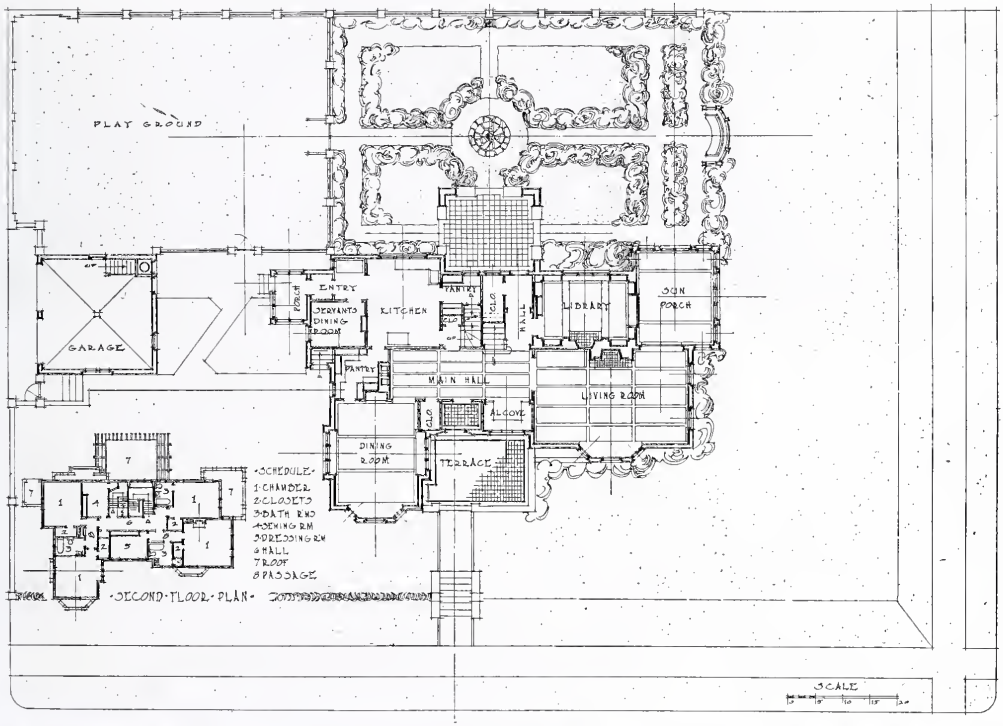
Sun Porch.



The Library.

RESIDENCE OF MR. F. H. CARPENTER.

Minneapolis, Minn. Wm. M. Kenyon, Architect.



Floor Plans.



Street Elevation.

RESIDENCE OF MR. F. H. CARPENTER.

Minneapolis, Minn. Wm. M. Kenyon, Architect.



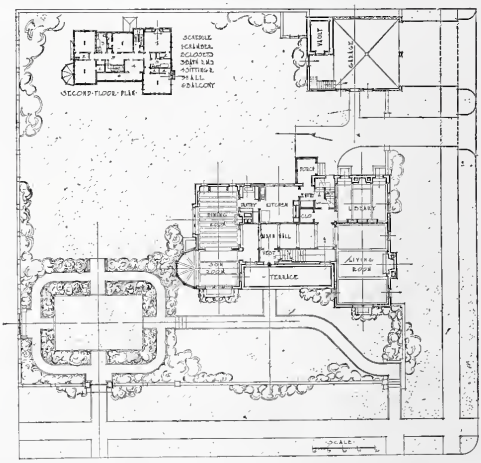
Recreation Room in the Basement.



Stair Hall.

RESIDENCE FOR MR. GEO. P. THOMPSON.
Minneapolis, Minn.

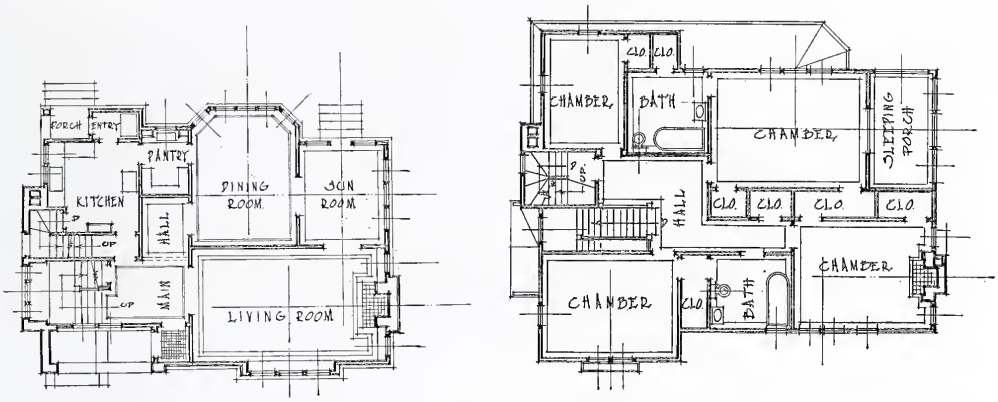
Wm. M. Kenyon,
Architect.



Floor Plans.



Garden Elevation.



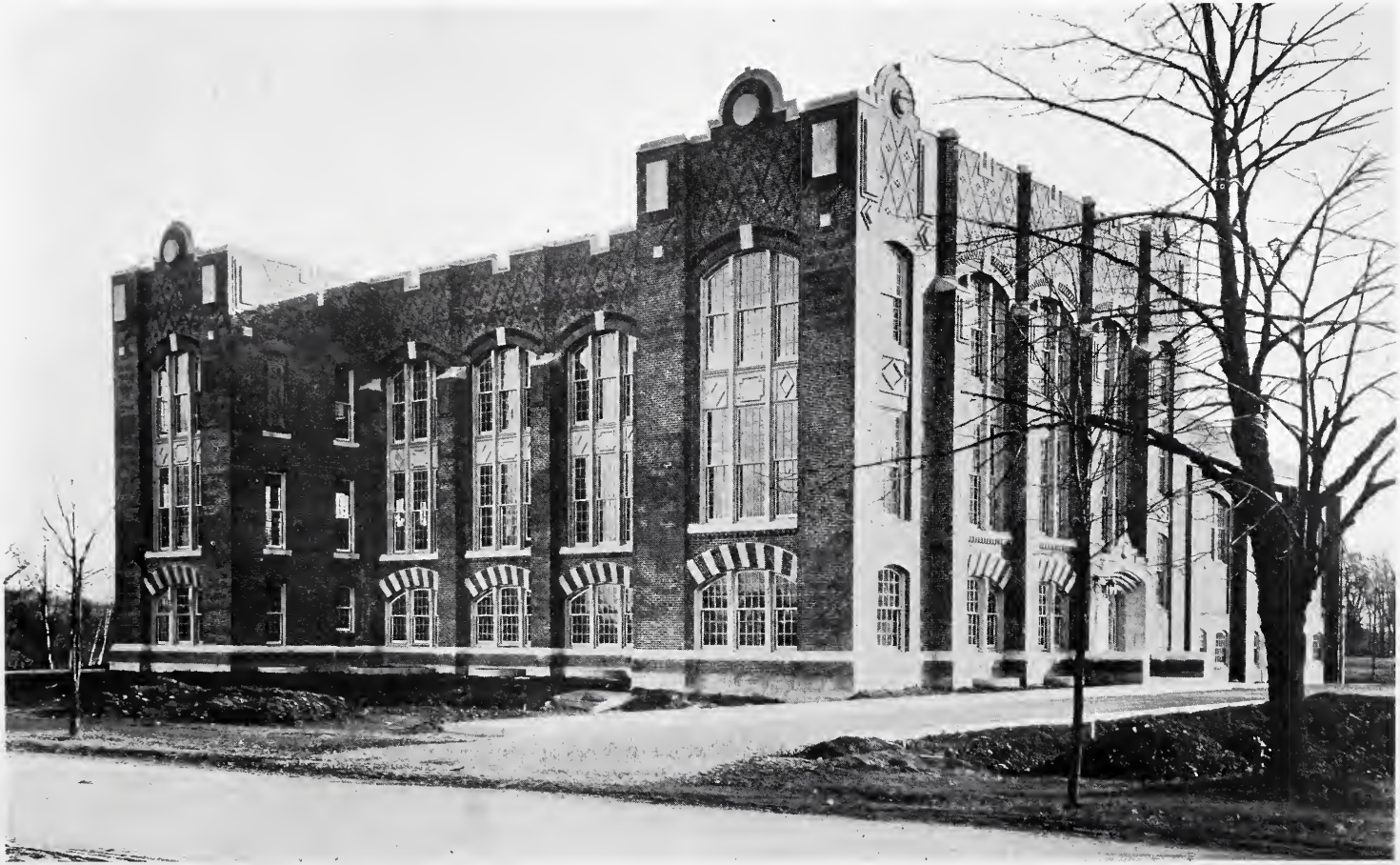
Floor Plans.



Street Elevation.

RESIDENCE OF MR. C. H. COCHRAN.

Minneapolis, Minn.



THE GYMNASIUM, WELLESLEY COLLEGE (1909),
WELLESLEY, MASS. J. A. SCHWEINFURTH, ARCH'T.

ARCHITECTURE OF AMERICAN COLLEGES

X

THREE WOMEN'S COLLEGES—VASSAR WELLESLEY & SMITH

By MONTGOMERY SCHUYLER.

WAS TENNYSON, in his "Princess," the "onlie begetter" of the actual women's colleges of Great Britain and America? Sir Walter Besant was unquestionably, by his novel "All Sorts and Conditions of Men," the beginner of the movement which resulted in the erection of the "People's Palace" in London. Over the completion and "inauguration" of this edifice the novelist had the happiness of surviving to preside. Whether it has since fulfilled the bright previsions of his imagination one does not accurately know. However that may be, and even if the project has turned out to be a disappointment to its projectors, the disappointment is not his.

It is true that one cannot exactly "see" the author of "The Princess" presiding over the inauguration of a women's college. Feminine as some critics may have found some of his verse, nobody ever found the versifier himself other than exclusively masculine. He was not in the least a prophet of sexual equality, but only, as we may say, of sexual equivalence. The head of a female college could no more invoke him as a prophet of her cause than could Mrs. Pankhurst. There is in his "medley" a vein, not of masculine mockery, but of genial and superior masculine banter of "a certain condescendsion" in his treatment of the theory which he imagined to be embodied in practice, the theory

> Maintaining that with equal husbandry
> The woman were an equal to the man,

and equally about his vision, long ago become everybody's

> Pretty were the sight
> If our old halls could change their sex, and flaunt
> With prudes for doctors, dowagers for deans,
> And sweet girl-graduates in their golden hair.

to say nothing of the pathetic collapse of the imaginary institution.

Tennyson is not, in fact, in the least likely to get a statue in the vestibule of any college for women, at least not on the score of his "Princess." And yet who can say that the beauty of the poet's vision of a separate and equal higher education for women, irrespective of the post-graduate lot in life of its beneficiaries, may not have appealed to some more serious and strenuous dreamer who successfully strove with some affluent benefactor to make the dream come true.

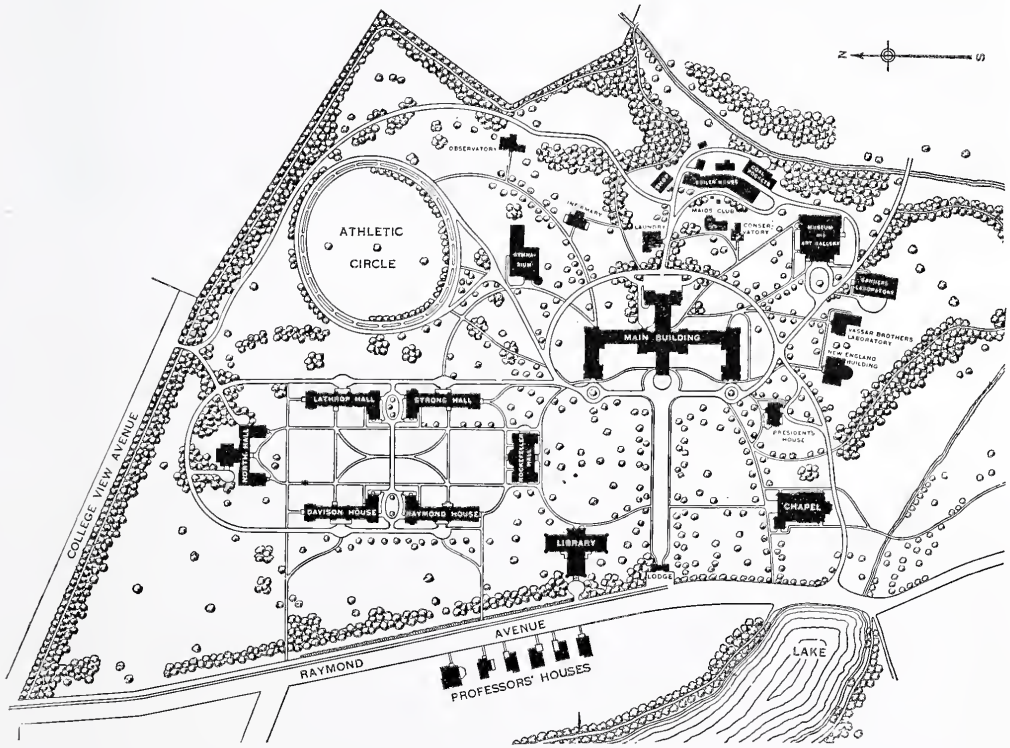
The dates, at any rate, are instructive. "The Princess" was published in 1849. Twelve years later, the germinal idea of a college for women, equal in its requirements and advantages to those of the existing colleges for men, took root and sprouted into the charter of Vassar College. American soil is perhaps more congenial to new ideas in general than that of Europe, and particularly than to that of the British Islands. To this particular order of ideas it is certainly so. Nobody can doubt that who has read Charles Reade's "Woman Hater" on the struggles of American women to obtain medical education in Europe, or the tributary letter from female American medical students which his chivalric championship of their cause evoked. The charter of Vassar bears date January 18th, 1861. Pretty well a decade had elapsed before "the sincerest flattery" of imitation was bestowed upon this pioneer by the establishment of other women's colleges endeavoring to supply the now recognized demand to which it was either demonstrated or assumed that the pioneer was not entirely adequate to sup-

plying. Smith was incorporated in 1871, Wellesley in 1875. On the other hand, or the other "side," the oldest of the women's colleges is Girton, at Cambridge, established there in 1873, though to be sure after a tentative and provisional start at Hitchin, where it had languished for the four years since 1869, and was thus at its earliest eight years junior to Vassar. The second of the Cambridge colleges, Newnham, namely, dated from 1875 as such, though it or its predecessor had been a "hall of residence" for women taking such special university lectures as were open to them, from 1873. As to Oxford, one recalls the remark of the Cantabrigian Macaulay that the distinction of being further behind the age than any other body of the English people is one which that learned body acquired early and never lost. Somerville College was the first of the Oxonian experiments, and Somerville dates only from 1879. Lady Margaret Hall is of the same year. Then follow St. Hugh's Hall, 1886, and thus a year younger than Bryn Mawr, and St. Hilda's Hall coming down to the recency of 1893. Upon the whole, it seems that we are entitled to claim the woman's college, as distinguished from the "Seminary for Young Ladies" as, essentially, an American development.

VASSAR
(1861)

THE BEGINNINGS of institutions even of quite recent establishment are apt to be obscure. That that is not the case with Vassar is due to the fact that in 1867 Benson J. Lossing, one of the trustees of the young college, and a painstaking and accurate historian, was requested by his fellow-trustees to prepare a memoir of it. This he did in a volume "Vassar College and Its Founder," which, quite apart from its literary contents, is notable and worthy of preservation as an example of the best that American presses could do in 1867, the year of its publication, in printing and wood engraving. From this it appears that Matthew Vassar, though he happened to have been born in England, had been brought to Poughkeepsie at the age of four, four years before the close of the eighteenth century. His interests were entirely identified with that place, in which his seniors had begun, and he had taken over and enlarged a brewing business which yielded him in turn a livelihood, a competence and a fortune. Having no children, he cast about for ways and means to make his fortune profitable to his fellow citizens, according to Bacon's famous sentence that "the best works, and of greatest merit for the public, have proceeded from the unmarried or childless men which, both in affection and means, have married and endowed the public." Matthew Vassar was of an entirely open mind as to the form which his "endowment of the public" should take. He had serious thoughts of an hospital, determined very possibly by the circumstance that he was a kinsman of the Thomas Guy who founded Guy's Hospital in London. It seems to have been in the first place the enthusiasm in behalf of the higher education of women of a niece of his who conducted a "Cottage Hill Seminary" on the river bank near Poughkeepsie, but who died before her uncle's project took shape, and secondly and even more influentially, the counsels of a certain Dr. Jewett, a fellow Baptist of the benevolent brewer, and the successor of his niece in the conduct of the seminary, of which he had taken charge as early as 1855, which diverted the benevolence of Matthew Vassar from a hospital to a college for women. Dr. Jewett became, in fact, the first President of Vassar, and in the early sixties made a tour of Europe in quest of information relevant to the solution of his new problem. The question of the buildings suitable to his enterprise and capable of accommodating "four hundred students" on the selected site two miles eastward of Poughkeepsie, had concerned the founder from the first, and he had employed an architect, Tefft by name, who had a special standing in school building, to devise plans for the

new institution. The plans were prepared but not used. Tefft went to Europe to study college architecture, and died at Florence, and James Renwick, still "Jr.," and fresh from the recent laurels of the Smithsonian Institution in Washington, was employed in his stead. Although the civil war supervened almost immediately upon the granting of the charter, the work went steadily on, and by the autumn of 1865, at an expense of something less than half a million, the buildings of the original scheme were so far completed as to be opened for the purposes which they have ever since been subserving.



Plan of the Grounds and Buildings,
VASSAR COLLEGE.
Poughkeepsie, N. Y.

Nothing could be less like the irregular "Norman" of the Smithsonian than the formal and symmetrical and mansarded Louis Quatorze of the huge principal building of the new college. Its humble brickwork would hardly be adopted now in connection with the chosen style. More simplicity and more variety of treatment would be sought by an architect limited to these materials. But at that time nobody questioned that a building as big as possible, and answering as many communal purposes as possible was the correct basis for an "institution." The "pavilion system" had not come in for hospitals, let alone colleges. Accordingly, we have the huge building, five hundred feet long, two hundred deep, and nearly a hundred high, mainly devoted to "dormitories," or studies and bedrooms, but with an extension which is or was a dining hall on one floor, and a chapel and gallery on two more. In spite of the contrast between the pompous style and the simple material, the Ludovican facade has an impressiveness of its own, even to-day. This is much enhanced by the effective placing of it, well back from the road, with a broad and straight way leading to the central



THE LODGE OR GATE HOUSE, VASSAR COLLEGE (1863).
James Renwick, Architect.

entrance from the porter's lodge, homogeneous with it in style and material, of which the archway frames the vista that is closed by the central pavilion. The innocent pomposity of the little porter's lodge with its big pavilions has an attraction of its own. The original plan was rational and comprehensive, and evidently the architect had the co-operation of a landscape gardener, traditionally reported to have been Mr. Olmsted, though there seems to be no documentary evidence on that point. The interior luxury of a multi-colored marble staircase has doubtless been added since the original erection, with no other effect upon the irreverent undergraduates than to make them nickname it "Soap Hall." The architectural detail is not very good, from any point of view, but the grime of half a century gives some venerableness to a front which by its extent alone would be sure of making its impression. Other buildings of the original scheme are what is now known as the Museum and Music Hall, but was evidently intended at first as a riding hall, its queer curvilinear roof denoting a truss span-



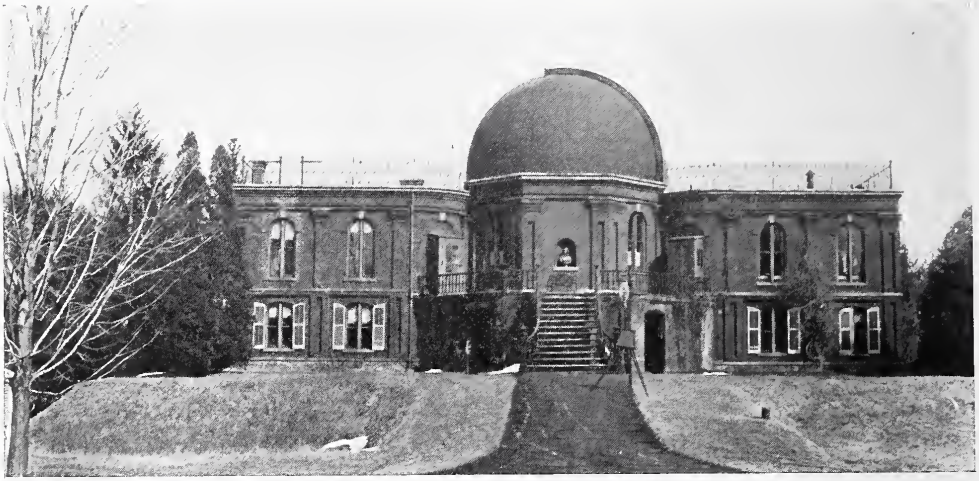
THE MUSEUM AND MUSIC HALL, VASSAR COLLEGE.

ning the entire interior space without intermediate supports. The form had a real relevancy to the original purpose, which it has of course lost with the departure from that purpose and the subdivision of the interior to adapt it to purposes far from the purview of the original designer. Small blame to anybody concerned.

It was some years before Vassar felt itself outgrowing the original nucleus of its architecture. And it has to be owned that that original scheme was laid out with such precision as to allow for and encourage the whole subsequent development. When the visitor even of today recalls his impressions of the college, the deepest of them is that winsome if absurd porter's lodge, that spreading front and towering Ludovican pavilion behind, and the long straight avenue that connects them and that places the big building at its proper distance and in its proper place "in the picture." To have maintained this primary effect is "equally creditable to all parties," to the subsequent architects who would not have done at all what the original architect did, if they had been in his place, to the original architect whose conception imposed itself upon his otherwise minded successors to the extent of making itself thus respected. Truly, as to these things, and as to their preservation of the history of nearly half a century, and a half century certainly very eventful, if not so certainly fruitful, in the history of American architecture, one would not wish Vassar different. That effect of the porter's lodge, the long avenue and the big building behind, even though you may be disposed to smile at it as so old-fashioned, you cannot deny to be worth while. It is much better worth while now than when "its new cut ashlar took the light," for at that time, according to Lossing's account, at the time in the summer of 1861 when ground was broken for the college, the site, which had previously been the Dutchess County Race Course, "was without tree or shrub." But this bareness was speedily clothed. The effect of the long straight avenue would have been very depressing if it had not been. Plantation and gardening went on pari passu with the work of construction, and when the buildings of the original foundation were ready to fulfill their intended uses, suitable surroundings had begun to be supplied. At present the gardening of Vassar is an integral part of its architectural effect, and the appro-



THE PRESIDENT'S HOUSE, VASSAR COLLEGE (1895).
Rossiter and Wright, Architects.



THE OBSERVATORY, VASSAR COLLEGE (1865).
James Renwick, Architect.

priateness and copiousness of it count for very much in the total effect. For the near future, one hears of an extensive arboricultural and horticultural project, under the direction of Mr. Samuel Parsons, for the still further enhancement of the inherent and acquired charms of the place.

Upon the whole, Vassar has been fortunate in its architectural development. The original grandiose manner of design may have come to wear a slightly comic aspect in comparison with the manner of its execution, certainly not grandiose. But it was a scheme, and a considered scheme. That was not common in 1861, and there was much virtue in that. The alternative to the Louis Quatorze would probably have been the polychromatic Gothic with which the author of the original architecture of Vassar was concurrently diversifying and variegating so many peaceable landscapes. As between Mr. Renwick's secular Gothic and Mr. Renwick's Ludovican classic, the choice would be difficult. That the adopted manner was less ambitious, even if more pretentious, and more humdrum than the rejected manner has come, after half a century, to

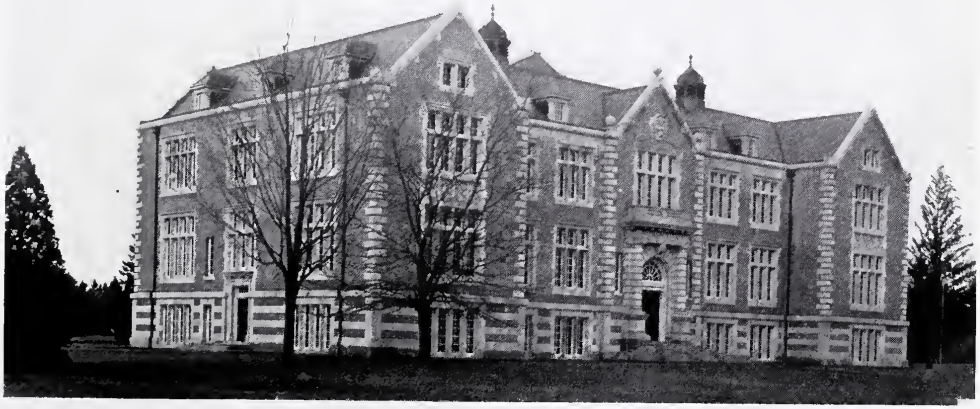


LATHROP HALL, VASSAR COLLEGE.



THE ALUMNAE GYMNASIUM, VASSAR COLLEGE.

seem a positive advantage. The original foundation, costing some half a million, was fairly complete in itself, and might, better than most architectural nucleuses, stand by itself in an environment of subsequent erections composed in an avowedly different manner, provided they were so segregated as not to seem part of the original scheme nor to come into direct competition with it. This requirement has been secured, and the securing of it was made possible by the original scheme, considered as a work not less of landscape architecture than of the building. The "New England Building" alone one is pained to note as a distinct architectural jar. Otherwise each group of buildings, and each important building has its own environment, preventing it from being seen in any discordant relation with architecture with which it has no affinity. The fashions which have prevailed since the original foundation are pretty much all represented at Vassar, the Romanesque of the chapel and the Romanesque of a different inspiration of the Alumnae Chapel, the "American suburban" of the President's house, the Collegiate Gothic of the Library, the different modes of "collegiate" in Lathrop Hall and Rockefeller Hall, the nondescript of the new North



ROCKEFELLER HALL, VASSAR COLLEGE.

Hall with its steel framed and many-storied tower. In the description this threatens a mere higgledy-piggledy, like so many others we know and deplore. In fact, thanks to the original scheme and to the successful pains that have been taken in modifying and expanding it to meet new exigencies, the original expenditure of half a million has been multiplied by five and the effect is not that of higgledy-piggledy, but of a series of groups, including the original group of half a century ago, of which each has its own character, and none violently conflicts with its neighbor.

This segregation and seclusion of each of the possibly belligerent elements are not the same thing as conformity, though they tend to the same result of peace and quietness. They are effected by the art rather of the landscape gardener than of the architect, and it is of the value of the gardening to the effect of the architecture that Vassar is one of the most exemplary American evidences. For in fact a college ought to be a park, whenever it can afford the space so to be, and ought to be willing to make considerable sacrifices to the end of becoming so. Is not that the most alluring of all the descriptions of Oxford which gives equal weight to the gardening and the architecture; "Oxford, spreading her gardens to the moonlight and whispering from her towers the last enchantments of the Middle Age"? One result of this mode of designing a college is that the beholder is not so exigent as he otherwise might be as to the strictly architectural merit of the buildings. If an edifice fills its place and comports with its surroundings it will very fairly pass, and in these respects, taste counts quite as much as skill. Not that the buildings of Vassar need any special allowance on this score. They are all, all the recent ones, fairly up to the average of American college building, and the best are considerably above that average. Luckily, the show buildings, those upon which most money has been spent, are also those which most conspicuously show that the money has been well spent. We need not waste time and space in discussing the Alumnae Gymnasium, beyond saying that it is a negotiable specimen of its time and style, the style being the Richardson Romanesque which accurately enough dates itself, wherever you find it, as of the eighth or ninth decade of the nineteenth century, and the accuracy of which, as a specimen, is not in this case disturbed by any "personal equation." Neither Lathrop Hall nor Rockefeller Hall need detain us, after we have acknowledged each to be a negotiable and well behaved specimen of its respective "style." The President's House, which we have called an example of the American Suburban in domestic architecture, makes rather more of an individual impression. True, it might be an "American gentleman's residence" almost anywhere, but it does nevertheless actually and even rather exquisitely fit its collegiate surroundings, and is a pretty little success, all the more successful for its environment. But the two show buildings upon which money has been most lavishly spent one is not only rejoiced but a little relieved to find worthy of their elaboration and expensiveness.

The two show buildings are, as naturally they should be, the Chapel and the Library. Of the former it seems rather odd that the pupils and successors of Richardson, determining upon Romanesque as the style in which they would work out a college chapel, should have abandoned the Provencal Romanesque in which the master had won such successes, and reverted to the "Norman" phase of the style. However that may be, it is certain that the actual chapel recalls rather the abbey churches of Caen than any example further to the Southward. One hastens to add that the result of their labors justifies them. It is hard to imagine any edifice fitting this particular site more appropriately than the edifice which occupies it. It is very prettily placed, with one of its flanks mirrored in the pool which, whether it be in fact natural or artificial, is equally a feature which we owe to the original plan of Vassar. Thanks to the isolation enforced by judicious plantation, the site, though distinctly enough a part of a rather crowded and busy campus, has still its seclusion, and nothing could be-



THE CHAPEL AT VASSAR COLLEGE,
SHEPLEY, RUTAN & COOLIDGE, ARCH'TS.



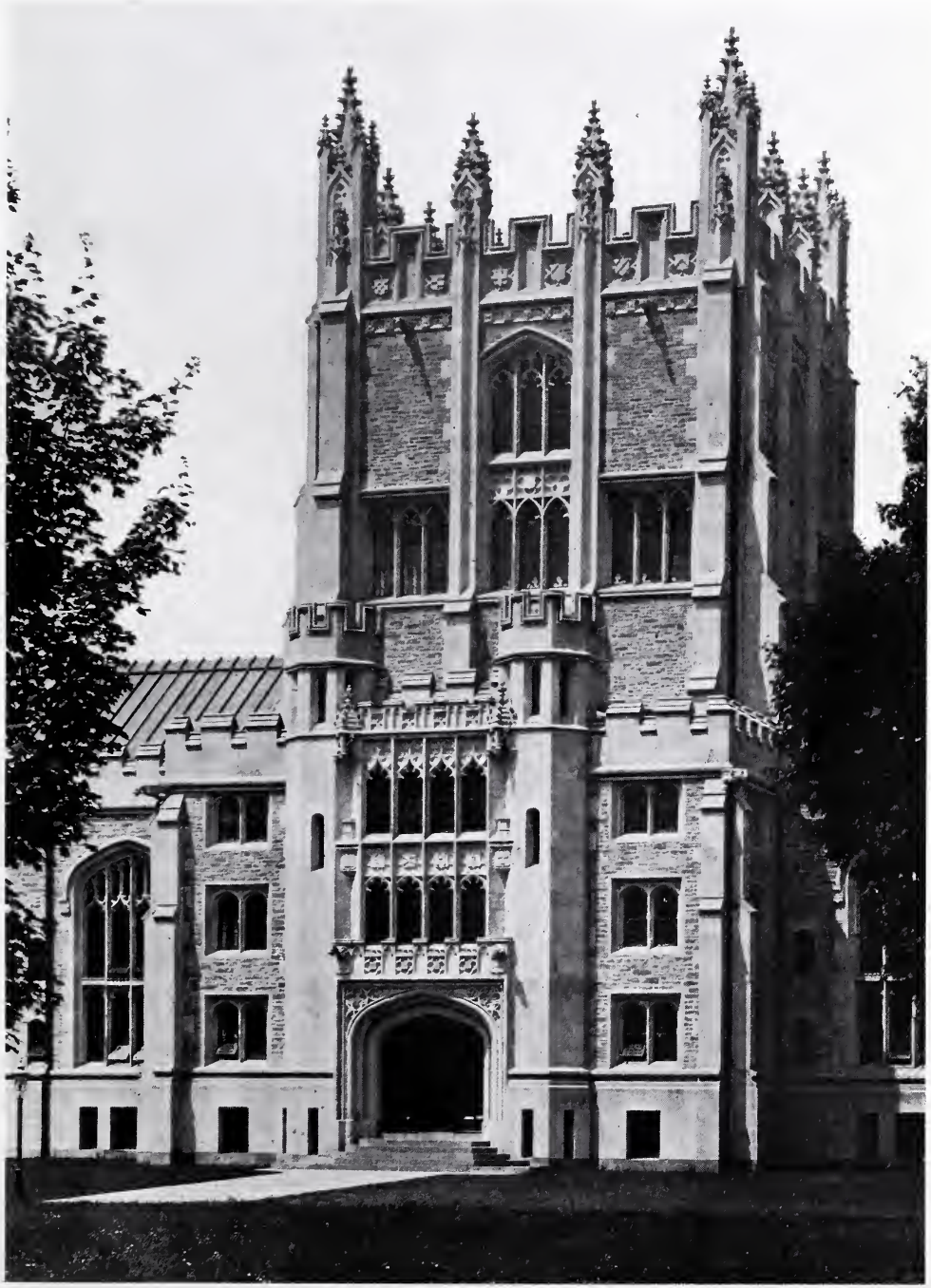
View from the Lake.



Rear Elevation.

THE CHAPEL AT VASSAR COLLEGE.

Shepley, Rutan & Coolidge, Architects.



THE VASSAR COLLEGE LIBRARY.
ALLEN & COLLENS, ARCHITECTS.



THE VASSAR COLLEGE LIBRARY,
ALLEN & COLLENS, ARCHITECTS.

come its surroundings better than this flank of rough stone, with its lighter wrought work, this peaked transept and circling apse and this square squat tower. The piece of Norman is quite where and as it ought to be. There is no purism about the design, all the same, and the interior is developed, in the open-timbered construction of a Gothic much later than the rude Norman of the exterior, into a spreading "auditorium" adequate and appropriate to its purpose as the most solemn place of assemblage of the inmates of the institution.

Equally appropriate to its purpose and its surroundings, though of a date of erection some years later, and of an historical style some centuries later, is the Library. This is, perhaps, when one has won his way inside, and escaped from the straight way which leads from the porter's lodge to the central pavilion of the old Main Building, the most conspicuous object on the campus, and it is fully worthy of its conspicuousness. The "multitudinous pinnacle and diademed tower" of the latest phase of English Gothic very suitably crown the low and weighty mass, and find a function, as one divines from without, and ascertains from within, in enclosing and embracing an impressive central hall which is one of the most successful of our efforts in this country at a consistent and appropriate collegiate architecture. These two culminating features of the architecture of Vassar are noteworthy and impressive in themselves. But they gain greatly in noteworthiness and impressiveness from being simply a higher power of the subordinate and accessory architecture which surrounds them. And this in turn proceeds from the fact that Vassar started, fifty years ago, with a comprehensive scheme, in which architecture and landscape gardening were combined and cooperative, and which has been found adequate to the development of the institution, in spite of the wide divergency, in the technical style of the later work,



THE VASSAR COLLEGE LIBRARY.
Allen & Collens, Architects.

from that of the nucleus of the early sixties. The moral seems too plain to be missed hereafter.

There is still another building at Vassar very worthy of consideration. This is the "North Hall," the latest addition to the architecture of the institution, and clearly the most questionable. Here, the latest developments of commercial and residential architecture, enforced in regions far more crowded than the campus of Vassar, have been utilized, in so much that a steel-framed tower of nine or ten stories rises from what one has come to regard as the normal limit of altitude of collegiate building. One does not "see the necessity" of beginning at Vassar. There are so many other campuses more crowded. At the same time, one has to recognize that the innovation has been attempted at a point where it works the least derangement of the pre-existing building of the institution. One also has to recognize that, given the steel-framed tower as an element of a group of college buildings, this is a clever and considered design, in which the central tower is prevented by the treatment of the other parts from too outrageous a spindling, and where it does really take its place as the dominant feature of its own group. However horrifying the innovation may be to conservative architects of college buildings, they have to recognize that "to this complexion must it come at last" if not with the architecture of so secluded and spacious an institution as Vassar, at least with the architecture of colleges more cramped for room, in which the vertical dimensions is the only one left that is available for expansion. Such architects may profitably employ themselves with the question how and where, if the "donnée" of North Hall at Vassar were imposed upon them, they could improve upon the result attained in this initial experiment, the conditions of which are so sure to be repeated and even aggravated elsewhere.



NORTH HALL, VASSAR COLLEGE.
Pilcher & Tachan, Architects.

SMITH COLLEGE (1871)

Smith is remarkable among other things for being the only woman's college founded by a woman. Sophia Smith was not only childness, like Matthew Vassar, but unmarried, and, like him, "endowed the public." Born in 1796, she was already sixty-five years old when her brother, Austin, died and left her a large fortune. She had no way of spending it, and no one on whom to spend it. She consulted her pastor, who worked out two alternative schemes for its disposition. One was the woman's

college, which actually resulted; the other an institution for deaf mutes. To this latter she inclined, and in 1861 made a will founding the institution for deaf mutes; but in 1867 private munificence and State aid had combined to meet this need. Accordingly Sophia Smith changed her will and became, in 1868, the founder of Smith College. Her last will was executed in March, 1870. She died the following June, and the charter of Smith College was granted March 3, 1871.

Hadfield had been the lifelong home of Sophia Smith and would seem to be the natural habitat of the institution she founded. In fact, a section of the charter provided that the college should be established in Northampton if the citizens or the town should raise and hand over to the trustees twenty-five thousand dollars; otherwise the college was to be established in Hadfield. But Northampton promptly seized its opportunity, and the money required was voted by the town in March, 1871. It just about half sufficed to pay for the site, composed of two adjoining residential plots, those of Judge Dewey and of Judge Lyman. The establishment of the college in Northampton was fortunate for several reasons. In the first place, the town itself had a good library, and one of the townsmen had already declared his intention of leaving enough to found another, a special library of research. Northampton was also abundantly provided with churches, to which the site chosen for the college was convenient, one of them recalling by its name the memorable pastorate of Jonathan Edwards. There was thus, it was decided, no occasion for spending any of the funds of the college upon a library or a chapel, and for many years Smith College had neither of the buildings which are commonly assumed to be primary requisites of a collegiate institution. There was no urgent need of them, for to this day it is evident to the stranger in Northampton, almost at first glance, that Smith College "owns the town."



THE DEWEY MANSION, SMITH COLLEGE (1826).
Northampton, Mass.

In another respect the choice of site was fortunate; one of the estates purchased for the college had upon it the Dewey homestead. This was a mansion dating from 1826, one of the early examples in this region, if not the very earliest example, of the Greek revival. 1826 was about as early as an authentic example of the Greek revival could have been erected, except from the designs of one of the few architects then in the country who were able and disposed to possess themselves of copies of Stuart & Revett's monumental and costly "Antiquities of Athens." In 1824,



Music Hall. College Hall.
SMITH COLLEGE, NORTHAMPTON, MASS.
Peabody & Stearns, Architects.

however, Gwilt began the publication of a new edition of Sir William Chamber's "Treatise on Civil Architecture," with some illustrations from the "Antiquities of Athens," which was at about that time released from copyright. Classical Grecian detail was thus brought within the reach not only of the architects of the larger cities, but also of the rural mechanic. The probable builder of the



HILLYER ART MUSEUM, SMITH COLLEGE.
Peabody & Stearns, Architects.

Dewey homestead was a mechanic of a superior kind, no other than George Cutler, who, upon his graduation from Amherst, in 1826, took up the profession of "housebuilder." The Dewey homestead, it will be observed, dates from the year of his graduation, from a college only a few miles away. An Ionic temple at Amherst, the Boltwood house (1828) is known to be by Cutler, and the presumption is strong that he was also the author of this example of the revival in Northampton two years earlier. The detail is, in each case, that of the Ionic of the Erechtheum, and the order is, in each, tetrastyle, the chief difference being that the columns are more widely spaced in Northampton than in Amherst, where classical precedent is strictly followed. In either case the example of a refined piece of architecture was an especially lucky acquisition for the college of which it was the architectural patrimony, so to speak.

The Dewey house became the first residential building of Smith. The first academic building was College Hall, the dedication of which, July 14, 1875, was also the occasion of the formal inauguration of President Seelye, who had been performing presidential functions already for two years. Here also the young institution was fortunate in its architect and its architecture. The Gothic revival was at its height in 1875, and the choice of no other mode of building would have been considered compatible with a seat of "culture." There are few better examples than College Hall of Victorian Gothic at its best. The specific and detailed expression of each important part of a building the revivalists felt to be imposed upon them. The danger of this mode of design is, of course, that variety and expressiveness will be attained at the cost of unity and repose. The expressiveness in this case is specific and detailed, and the "features" are animated and picturesque, but the animation does not entail restlessness. The general grouping of the building and the union of the features secured by the predominance of the tower combine the "features" into an architectural physiognomy. One would be at a loss to name a more creditable example of its style and date than this initial building of Smith College.

Other buildings followed from the same hand, and of the same character, though the polychrome of College Hall is subdued in Music Hall and also in the singularly attractive and artistic Hillyer Art Museum, no doubt to their architectural advantage, while the expressiveness is retained. To be sure, not all of the early buildings of Smith are as good as these. The "pavilion system" of dormitories was early adopted. Such a building as Wallace Hall, still designed under the Gothic inspiration, is a congeries of cottages suitable to their purposes, and negotiably composed in an architectural sense, but in such a building as the Lilly Hall of Science, it is clear that the designer has succumbed to the temptations of his style, and that the features by no means compose a countenance. In this respect a later dormitory, Baldwin House, commends itself by simplicity and unpretentiousness, being, in fact, a piece of "Old New York" or possibly of "Old Boston," which, nevertheless, looks very much at home in its actual surroundings A still later pair of dormitories by the same architect has the additional advantage of attaining the same simplicity, solidity and homeliness, without invoking reminiscences of other times or other places They seem quite to have grown out of the soil.

The need of a college chapel, which was so little felt in the early days of Smith, has not, even yet, been urgent enough to produce a special building for that purpose. An Episcopal church, a very spirited and individual piece of Gothic, stands almost within the college grounds, and is quite extensively accepted as the college church, although, in fact, it has no other connection with the institution than that of proximity and of natural affinity. A library, however, has lately been added, which is among the noteworthy buildings of the college. It is of excellent material and workmanship, and in design it is evident that the aim has been to obtain simplicity and repose. The ranges of equally spaced openings, the modest scale of the detail, and the large expanse of the roof all conduce to this expression. The de-



THE SMITH COLLEGE LIBRARY (1909),
LORD AND HEWLETT, ARCHITECTS.



THE JOHN M. GREEN HALL, SMITH COLLEGE, NORTHAMPTON, MASS. CHAS. A. RICH, ARCHITECT.

signer appears to have feared that he was carrying the simplicity too far, and that it might become monotony. Some spectators of his work would not agree with him, or at least would not agree that the central feature with which he has diversified the otherwise unbroken expanse is a successful diversification. This central feature is an arch, flanked by columns carrying a balcony and signalized above by a pedimented break in the line of the eaves. It is questionable whether the gain in variety compensates for the loss in unity and simplicity; whether it would not have been better to make the central arch of entrance simply one equal member of the continuous arcade and to omit altogether the order and balcony and the pediment, which so clearly exist for the sake of one another. All the same, the building undoubtedly makes the impression of an artistic and refined piece of architecture.

Although the need of a special place of religious assembly has not yet demanded its supply at Smith, the need of a general assembly hall for the common purposes of the institution has been recognized and supplied in what is doubtless the most monumental and imposing of the buildings of the institution. The motive will be recognized by those who know Dartmouth as in effect the motive of Webster Hall, which is, perhaps, the most imposing of the buildings at Hanover, but at Northampton the design has been carried out on so much larger a scale, and with so much greater affluence of means, as to increase the impressiveness of the result in a geometrical ratio. The seating capacity is twenty-five hundred, which is to say that the interior will hold one thousand more than the fifteen hundred undergraduate population of the college. The material of the monumental order is itself monumental, and everywhere it is clear that the architect has not been stinted. The result is not only by far the most impressive building of the college, but one of the most successful and impressive edifices of its kind in the collegiate architecture of the United States.

WELLESLEY COLLEGE.
(1875)

Wellesley, like some other widely advertised institutions, had no origin "peculiar to itself." In fact, Mr. and Mrs. Harry Fowle Durant, Mr. Durant being a Boston lawyer, had what in Colonial days would have been called a "seat," within negotiable distance of Boston, even in the 60's. It was not in those days within the limits of commutation but was "a summer residence." A beautiful little lake was the cynosure of the estate which the Durants acquired, and which, since they also, like all the other public benefactors and benefactresses, were childless, became the cynosure of their interesting life and of their hopes to be remembered. To secure their "improvements" and the continuous expansion of their improvements, seems to have been more the purpose of the Durants than to benefit their species. It was during the lifetime of both that the charter of Wellesley Female Seminary, which they judged to be the most meet device to secure their object, was enacted. It was in 1875 that the actual institution was chartered under the name of Wellesley College. Mr. Durant died many years ago, but Mr. Durant servives, or very lately survived, and from her own comparatively humble abode, also on the shore of Lake Waban, has seen the conjugal purpose fructify beyond the utmost aspiration of the conjugal dreams.

As in the case of Vassar, the original scheme of Wellesley consisted of one rather tremendous building. This building, considering its date, almost had to be in Victorian Gothic, like the architectural nucleus of Smith. Its name is the same, "College Hall," and the architect whose work most commended him to the founders was chosen to design it. This architect was Hammatt Billings, a draughtsman, painter, architect, illustrator, a person of exquisite artistic sensibilities, entirely anomalous and unprovided for in the general social and political scheme of the New England, and



WILDER HALL, WELLESLEY COLLEGE (1899), WELLESLEY, MASS. J. A. SCHWEINFURTH, ARCH'T.



THE FARNSWORTH ART BUILDING, WELLESLEY COLLEGE (1889).
Rotch & Tilden, Architects.

perhaps particularly of the Massachusetts, of the period just before the Civil War. A born artist was distinctly "not at home" in any part of the United States during the first half of the nineteenth century, but he was probably further from home in Massachusetts than anywhere else. This stray artist had, however, already had his successes. He had been chosen the architect of the Pilgrims' monument at Plymouth, the commemoration of an event which in its origin was then, as it has ever since been, regarded as, in its own neighborhood, by far the most important in the history of the world. It is considerably to the credit of the artistic sensibilty of the Durants that they should have chosen him as the "instructor" of their institution, and it is not their fault if the result is, upon the



THE WELLESLEY COLLEGE LIBRARY.
Shepley, Rutan & Coolidge, Architects.

whole, disappointing. The big building, 475 feet long and five stories high, is very well placed, right across the access to the main view, which is the view of the lake. The result of this situation to the stranger who passes through the building to the view, is very much such a surprise as that familiar to visitors to old Catskill Mountain House, which also is built directly across the view, and which, when he has traversed the building, he finds to be a view of what Fenimore Cooper describes, in the Catskill case, as "Creation." Nevertheless, the building is by no means so effective as it ought to be. We were just saying about the original "College Hall" of Smith that the specific expression of the parts and the details has there been overruled by a general notion of architectural unity. This is not the case with the "College Hall" of Wellesley. It "scatters." You have to infer and reconstruct the architectural idea instead of having it forcibly impressed upon you. Nevertheless, the building has its own impressiveness, and one is glad to record to the credit of the architect that it is still satisfactorily performing the functions for which it was erected.

It was almost immediately evident that Wellesley met a long-felt want. Hardly had it begun to furnish graduates before graduates began to furnish benefactions. Apparently it has never lacked for means to carry out its ends. It has been observed already, as to Smith College, that it "owned the town," but Wellesley is the town. One alights at the station and naturally betakes himself to the local photographer's and newsdealer's, close at hand, where he gets a sudden suggestion of local manners and customs, which might not in the least astonish him in a barroom, but which is rather paralyzing at the entrance to a woman's college, and a place which seems to rely exclusively upon sweet girl undergraduates for its support. This is a placard, conspicuously hung inside the door, setting forth that "Swearing is positively prohibited; not that we care a damn, but it sounds like hell to strangers."

The walk from the station to the main building entirely justifies the Durants in thinking that the estate which was their pride ought to be preserved from ordinary suburban subdivisions and allotments, and kept as an object of beauty and of public benefaction. It is true, one meets with curious anomalies even in this winding walk. For instance, the observatory seems to have been intrusted to an architect who, quite contrary to the usage, had too much money to spend. The exquisite marble, exquisitely wrought, serves neither its practical nor its picturesque purpose any better than rough brick work would have done. On the other hand, the power house, of which the votive designation imports that the college owes it to the most ruthless and promiscuous benefactor now living, bar one, does not transcend appropriateness to its function in material or in workmanship, but is an entirely congruous and appropriate object.

It is unhappily not to be denied that the recent architecture of Wellesley shows what Homer Martin, criticising the "Dramatic Symphony" of Rubinstein, described as "great variety—of purpose." As often, and indeed commonly, happens individual benefactors and individualistic architects have imposed their individual notions, to the detriment, or rather to the nullification, of anything like a general architectural scheme. The consideration how very desirable it is that a consistent scheme, in almost any negotiable and well-precedented manner, should be determined upon and held to in the architecture of an institution receives as striking and melancholy illustration, of the negative kind, at Wellesley as in most other similar institutions. It is true that when segregated, and separately considered, the individual works have their individual interests. In fact, they have all been done by American architects of the better class. At the same time, what has the mild Colonial of Wilder Hall, for example, to do with the strict classic of the Farnsworth Art Building or with the equally strict classic and equally pure white marble of the College Library? Truly the confusion of Babel has fallen upon our architects, and the lay observer may readily be pardoned for standing aghast in the presence of such a collection of incompatabilities, and longing for







Groups of Dormitories.
WELLESLEY COLLEGE, WELLESLEY, MASS.
J. A. Schweinfurth, Architect.

that Pentecostal day when the observers, and eke the authors, of this heterogeneous aggregation should "come together and be confounded because every man heard them speak in his own language."

The precision and purity of an example of any historical style simply lose their due effect when one has only to turn around to see possibly an equally pure and peaceable expression of an altogether alien manner. Is it the individualism of benefactors or the conceit of architects that gives rise to these "fortuitous concourses of atoms? This is a question which ought to induce some searching of hearts among both the benefactors and the architects, but most of all among the presiding authorities of collegiate institutions. These authorities, it should seem, should make an early commitment of their respective institutions to some uniform and understood way of working, and should "highly resolve" that they will have the courage to refuse unconformable benefactions.

In its later developments, Wellesley has been rather exceptionally fortunate, however, in its architects. A college chapel, of all buildings, one would say, is committed to Gothic, using that term in its largest signification, and the building is distinctly on its defense if it be other than Gothic. Wellesley Chapel is by no means an example of purism; there are even in the elaborated woodwork of its interior some erraticisms of timber construction which one has difficulty in reconciling with elemental mechanical principles, but the general impression, outside and in, is, nevertheless, that of appropriateness to place and purpose. The ground plan, considered as that of a place in which the spectators so largely constitute the spectacle, is effective, ingenious and well worked out. In the most recent of its developments Wellesley seems to have fallen into exceptionally good architectural hands. Of all the phases of English Gothic, that of Henry the Eighth seems to be most appropriate to collegiate uses, and yet it is singularly little illustrated at Oxford or Cambridge. One must go to Eton,

> Where grateful Science still adores
> Her Henry's holy shade,

one must go to Wolsey's building at Hampton Court, afterwards so contemned and classicised by the irrelevancies which one finds it so hard to forgive Sir Christopher Wren. Hampton Court seems to have furnished the motive of the double quadrangle, which is undoubtedly the most striking, and perhaps the most interesting, of the later work at Wellesley. There is no pretense of purism about this work, as indeed how could there be any about work founded on that very wilful English architecture of the later sixteenth and early seventeenth centuries?

Details and even features of the Tudor architecture are drawn from the time of the Stuarts, Jacobean is adjoined to Henrican. But, whencesoever derived, the features and the details go very fairly well together, and it is only a scholastic sensibility that is offended by the juxtaposition. To see what "a promise and potency of life" there was in that confused and irregular architectural period it is necessary only to consider the gymnasium of Wellesley. This is an absolutely modern, unprecedented and untutored assemblage of ordinary building materials to fulfill a rather commonplace requirement. There are even details, such as the projection of the segmental arches of the basement, which have no historical precedents that we are aware of, but which justify themselves by the great projection and emphasis which they assure to the main piers. The diapered decoration is merely a sensitive and rational employment of the most available building materials. But yet, not only how effective is the thing in itself, but how perfectly in keeping with the more precedented architecture of the great double quadrangle. One would be at a loss to name any example of collegiate architecture in this country which has more modernness, more realism and, in spite of its historical filiation upon a period of architectural degeneracy, more "life" than this latest work at Wellesley College.



Photograph loaned by Mr. Warren H. Manning.

KEW GARDENS, ENGLAND. GENERALLY WELL COMPOSED IN MASSES, SURFACES AND MATERIAL, THOUGH THE BUSH ACROSS THE WATER IS SOMEWHAT OF AN EXCRESCENCE. THE VALUE OF

LANDSCAPE DESIGN AND THE DESIGNER OF LANDSCAPE

By H. A. CAPARN

In response to many requests extending over several years, a course in landscape design has been arranged at Columbia University. The complete course will occupy an average of four years, and will be made up of subjects from the courses in architecture, engineering botany, and Pure Science, and will include surveying, geology hydraulics, and optionals in advanced building, French and German. The lectures and other instruction in the specialized side of the subject are undertaken by three visiting instructors, all members of the Society of Landscape Architects. They are Mr. Charles W. Leavitt, Mr. Harold A. Caparn and Mr. Ferruccio Vitale. The curriculum will lead up to the Degree of Bachelor of Science in Landscape Architecture as soon as funds shall be provided for the permanent support of a department of Landscape Art. Meanwhile the University awards a professional Certificate or diploma (without the Bachelor's degree) to all who complete the curriculum above described. A somewhat similar course leading to a degree has been given by the Lawrence Scientific School at Harvard for the past twelve years.

Previous to this time, authority in landscape design was claimed by landscape gardeners, architects, park superintendents, nurserymen, and in fact by almost anyone who could control the development of a piece of ground, whether in the diverse manners of the trained architect or the more or less untrained horticulturist, and most of them with more or less contempt for and indifference to the point of view of the others. Among all these men of knowledge and ignorance there have always been for two centuries some few who by their ability and force could command the respect of other artists; but they have not owed their success to training in any school, and until 1899, the year of the founding of the American Society of Landscape Architects, there was no concerted attempt to crystallize the current thought into a body of opinion, or to create a school of landscape design. Inasmuch as two of our greatest universities have given so serious attention to this subject, it will be worth while to inquire why and how it differs from the thought and the work both of the architect and the horticulturist and why its place among the arts is even now undefined.

Up to the beginning of the eighteenth century garden design was entirely formal; it did not differ in any principle from that of the building to which it was usually an appendage. But about this time garden design began to degenerate, its symmetry and quaintness were exaggerated and its charm missed, and it became the butt of wits like Addison, Pope and Horace Walpole. As these men ridiculed the prevailing style, not as garden haters, but as garden lovers, they naturally cast around for some other sentiment, some other suggestion, and, having been repelled by formalism, they naturally ran to the other extreme of the most untrammelled informality. They looked out on the face of nature, wild or tamed by the hand of man, and saw that it was always more or less good; and Kent, the first to practice in this new and free manner, was said to have "leaped the fence and seen that all

nature was a garden." That is to say, they saw everywhere innumerable combinations of foliage, flowers, grass, rocks, water and the natural forms of the earth's surface that would suggest motives for new combinations in a new manner and with a new feeling, all manifestly applicable to almost any situation and to any scale. It is no wonder that folk lost their balance over the fascinating discovery, that they often missed the point of it and committed absurdities in the name of "imitating nature" as great as any of the formalities they ridiculed.



Photograph loaned by Mr. Warren H. Manning.

A certain stately effect of large trees well placed on level ground. Notice the feeling of motion given to the lawn by the slight rises at the base of the trees and the perspective effect of the successive masses carrying the eye through the opening on the right with the aid of the curved path.

This informal, natural or naturalesque style, as it is variously called, differed radically from that in vogue from the days of ancient Egypt downwards, in that instead of imposing arbitrary, rigid and geometrical lines on the ground, it accepts those already existing, uses them as motives as far as possible and remodels them only to meet the needs of the problem or for better harmony instead of contrast. It takes the natural forms of the earth's surface, its incidents and irregularities, its materials, textures and colors, whether wild or modified by man, and uses them as suggestions for the work in hand. It is an epitome or conventionalizing of nature its exemplar as much as the work of the painter or sculptor. Its practitioner goes to the works of nature, wild or tamed, as the designer in other arts goes to the works of his predecessors in order that he may better express, not them, but himself.

In order to do all this effectively and with convincing authority, the designer in landscape must have a special and peculiar equipment. He should have a natural sympathy with the things that grow out of the ground, the materials in which he works, so that he may, like any



Photograph loaned by Mr. Warren H. Manning.

Cottages at Bristol, England. Informal grouping aided by foliage and especially by the single large tree towards the left.

other designer, be able to think in their terms. He should have an intimate knowledge of ways and means of the possibilities and limitations of these materials, his trees and plants, the most difficult, elusive, uncertain, complex and fascinating of all, and, in short, of an entirely different order from those of



Photograph loaned by Mr. Warren H. Manning.

A free and pictorial setting of a country house. The effect is greatly increased by the suave lines of the lawn and the movement of the curved path.

any other artist, for none other have any interest in themselves beyond what they receive from the painter, sculptor or architect who uses them. He should have not merely a sense of color, form and texture, but also of quality in foliage, of fit or unfit to surroundings because of character of growth, origin or sentiment attaching to them. It is not enough to refrain from injecting masses of hydrangea p. g. or scarlet salvia into the greenery of a rough country because they make fine color effects: he should feel when trees or bushes would be out of place, not because of their form, size, or character, but because they came from Japan or the nurseryman's hybridizing grounds. He should have imagination to see from the present to the future, from the mean little sticks he sets out to the spreading bushes or towering trees of twenty or fifty years hence. These and many more should he have, but over and above all patience and serenity to wait for results which he can demonstrate to no one, and ability to impose some of his own confidence and fortitude on the man who pays the bills, and his candid friends with their ignorant criticism and glib irresponsible advice. It is no wonder that landscape men of ability and force to make an abiding impression on their art and times are rare, but they have existed, such as Repton, Alphand and Olmsted the elder—men in the first rank of contemporary artists; and their work, their personality and the atmosphere investing them, and with which they invested the things they did and those they touched, were so individual, so little dependent on the thought and traditions of other men of creative gifts, as to place them in a class of their own as exponents of a fine art different from the others.

This style, vastly misunderstood as it mostly is, has proved so practical, so adaptable to nearly all conditions, so attractive to innumerable people for two hundred years, that it is and must remain by far the most popular way of treating the earth's surface. It is the style of practically all modern public parks, large or small, it must predominate in private country places of any extent, and it is beyond comparison the prevailing fashion in suburban lots; that one may travel miles of streets with trees and bushes and green lawns without seeing one of them well and consistently handled matters not: the style's the thing, and the example before us may no more show its capacities than a Harlem flat building shows the capacities of architecture. But the snare and impediment to the common understanding of informal design is that, when best done, it is least obvious; it often looks so natural that it does not occur to most people that anything very much has been done. We are so used to art of which the constructed or artificial nature is and must be its most apparent character, that good landscape work seems artless, and it is accused by many who should know better of lacking "design." Thus its best quality, that of perfect fitness, becomes its greatest danger. I have known an eminent sculptor walking in Central Park to remark that he knew no park that owed so little to art—not perceiving that Central Park in creation and expression is as artificial as one of his own statues. It is a paraphrase of nature as a statue of the model.

The general principles of formal or architectural design out-of-doors are, of course, the same as they always were, but its conditions have changed, more especially in this country. People are looking on a garden more as a place to grow flowers, and less as a mere setting to a building or a thing of mere decoration. In this climate of extremes it is difficult or impossible to reproduce the rich evergreen leafage of Europe, whose mild and moist summers and winters foster the growth of box, yew, holly and other evergreens that submit cheerfully to be trimmed into set forms, and which have largely influenced the style of gardening in Western Europe by providing the architect with easily realized rectangular forms in living foliage of rich color and texture. Moreover, there are evergreens in the commonest use over there which here can only be kept through the winter by protection—euonymus, Portugal laurel, aucubas, arbutus, orange trees, bay, cypress, and so on, according to latitude—which give a character to the planting not attainable here. In the Northeastern States, we can



Photograph loaned by Mr. Warren H. Manning.

AN ACTUAL INFORMAL GARDEN FITTED TO THE GROUND AS A BASE TO THE HOUSE.



GARDEN AND COFFEE HOUSE, VILLA ALBANI, ROME.

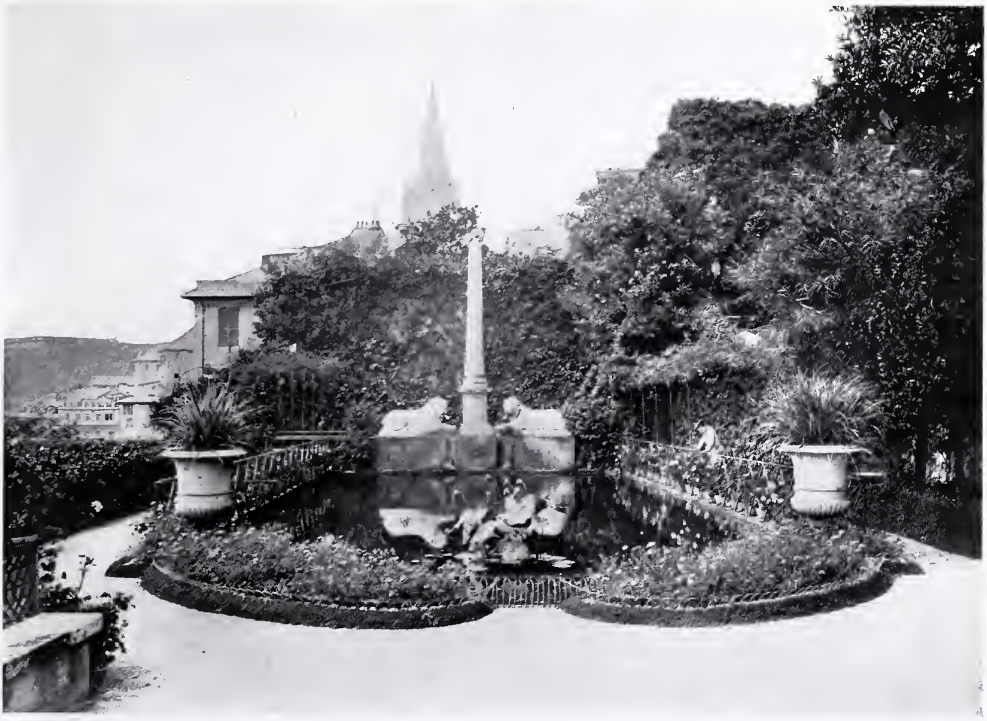
Formality serving as an extreme contrast to the picture of informally arranged scenes.

grow hardly more than two large broad-leaved evergreens, the rhododendron and the kalmia, and our planting material in consequence is largely deciduous and of a different aspect from that of England and France, looser in habit, less rich in color and less close in texture. In short, our natural development in landscape design, formal or informal, is away from the laborious and imperfect imitation of European models and towards work which is the outgrowth of our climate and the class of vegetation which flourishes in it.

After being eclipsed for several generations by the fashionable informality, formal design in landscape has returned to its proper place, and the modern landscape man can no longer consider himself properly equipped without a sound knowledge of architectural design. But to work in the modern spirit in any style, he needs also an intimate knowledge of his materials, which are now vastly more varied than when the gardens of the Middle Ages were planted, of tree, shrub and plant culture, and many other things of craftsmanship without which he will not be able to fitly express himself; for it is no longer sufficient to block out a scheme (excepting a purely architectural one) and trust to the nurseryman to plant it; and those who think that good outdoor design can be made in this way show an imperfect knowledge of the subject and lack of understanding of the good work they themselves have seen.

As the demand for landscape art and the number of those who practice it and take it seriously has increased so much of late years, its future seems to become continually larger and more assured. Its scope is continually widening, until it logically covers or touches almost any scheme into which the artistic disposition of any features of natural scenery enters. Those who have studied it most are most optimistic about it, and look forward with most expectation to what it will become, what they may give to and learn from it, and what, when it has found itself, it will be to the generations to come. Though inseparable from architecture on one side, yet, on another, landscape design is so different

in expression and requires so different a training and sentiment in those who practice it, that it has claims to be considered a separate Fine Art. And in view of the continually increasing specialization and technical knowledge necessary, both to the architect and landscape man, the truest unity will result in works to which each contributes the best of his own knowledge. Sculpture and mural painting are both necessary to the completion of many works of architecture, and the setting of a building is often as specialized a matter as its decoration. It is to pave the way for an education as authoritative as that of the painter or sculptor without whom the architect cannot fully express himself, that the courses in Landscape Design at Harvard and Columbia and many other universities have been instituted.



TERRACE VILLA ROSAZZA, GENVA.

Illustrates very well the preciseness and charm of formality in an irregular setting.



DEERFIELD CHURCH.

EARLY AMERICAN CHVRCHES

PART VI

DEERFIELD,— WINSTON,— SALEM
OLD SOVTH, BOSTON, MASSACHVSETTS
OLD DVTCH, TAPPAN

By AYMAR EMBVRY II

DEERFIELD CHURCH.

DEERFIELD CHURCH is architecturally a very interesting one; it was erected in 1824, but the author of its design is not known to me. Were we to assign churches to their authors as we do pictures I would say that Isaac Damon was probably the architect, but I have no evidence whatever to support this suggestion aside from a certain quality of its design.

Deerfield congregation was a very old one, the original meeting house having been built before 1675 with the Reverend Samuel Mather as its first minister, and like most of the early congregations (whose edifices were apparently very poorly constructed) two buildings fell to pieces in succession before the present one was begun. It is said that some of the interior work in the present church was saved from the older one, but the only thing which seems to be definitely known to have belonged to the older church is the weather cock which was bought in 1757 for twenty pounds.

THE HOME MORAVIAN CHURCH, WINSTON-SALEM, NORTH CAROLINA.

IT IS A LITTLE known fact that at about the same time the German Moravians settled in Bethlehem, Pennsylvania, another colony established themselves at Salem, North Carolina, a town which has now been combined with its neighbor Winston, and is known as Winston-Salem. The original settlement was made in 1753 and the Home Church was built in 1788. As is the case with the Bethlehem settlement the church forms part of a little seminary or college the buildings of which may be seen on either side of it. Little seems to have been recorded in permanent fashion regarding the church or that part of its history which has to do with its design and construction, in spite of the fact that many of the old Moravian customs are still preserved in Winston-Salem, even to the use of a band in place of an organ on certain occasions, and the burying of the males and females on separate sides of the church yard. Another interesting feature of the old life which has been preserved is the announcement of a death of a member of the church by blowing six brass trumpets in the steeple, the various tunes indicating the age and sex of the deceased. While the building has much of Colonial sentiment, its proportions, the tower and the treatment of the cornice indicate a certain remembrance of German traditions. While the church is perhaps not architecturally of the highest merit, it is, I think, properly included in this collection of early American churches because it is the best of a number erected by the early German settlers of this country.

One might also add that so far as is known, this is the only surviving church built before the Revolution in which George Washington did *not* worship.



INTERIOR OF DEERFIELD CHURCH.



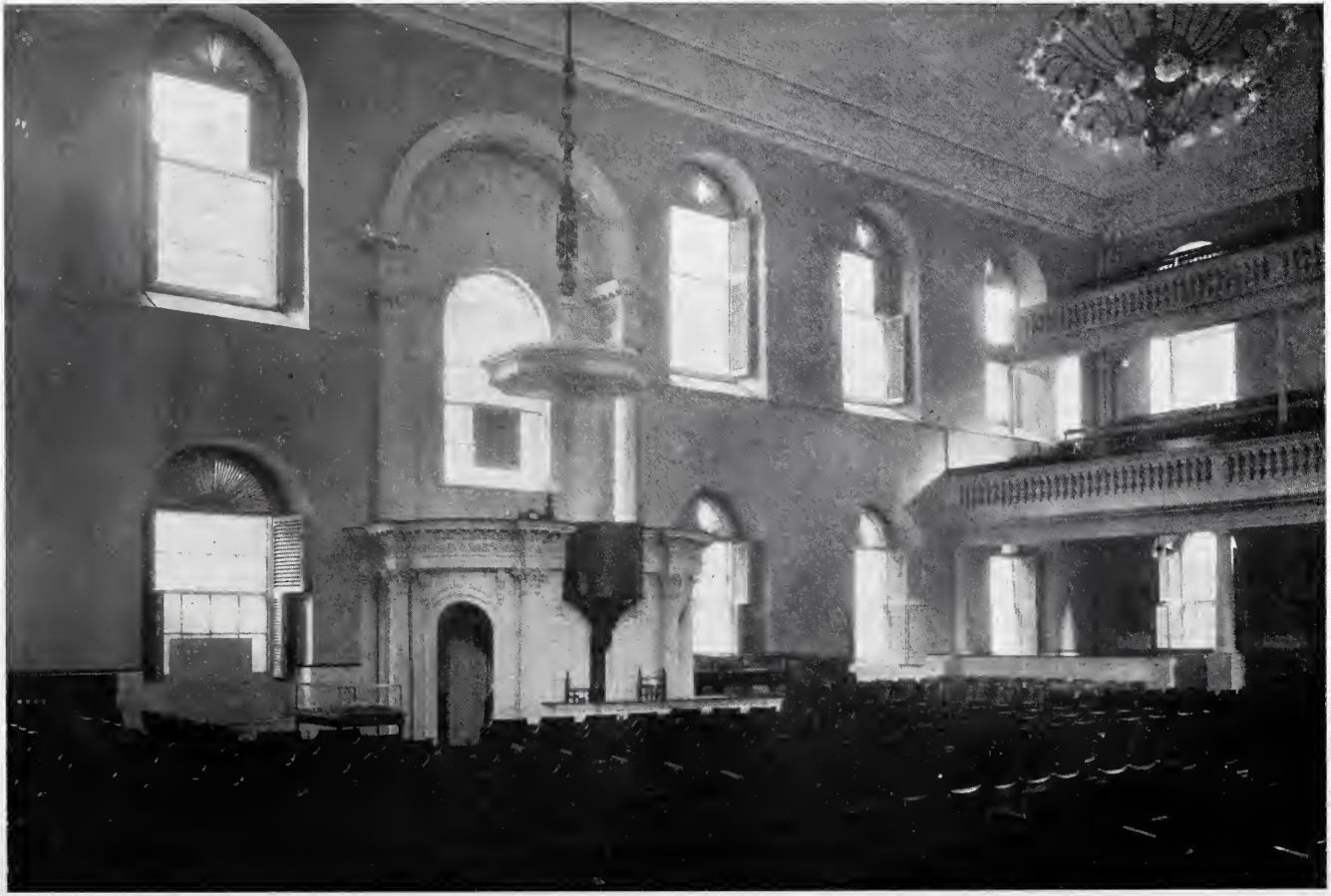
INTERIOR OF THE HOME MORAVIAN CHURCH,
WINSTON-SALEM, NORTH CAROLINA.



THE HOME MORAVIAN CHURCH,
WINSTON-SALEM, NORTH CAROLINA.



OLD SOUTH CHURCH, BOSTON, MASS.



INTERIOR OF OLD SOUTH CHURCH,
BOSTON, MASSACHUSETTS.



INTERIOR OF THE OLD DUTCH CHURCH AT TAPPAN.

OLD SOUTH CHURCH, BOSTON, MASS.

THIS CONGREGATION was the third in Boston, and the present building is perhaps the most famous of all our old American churches. The part that it and its congregation has taken in Colonial and Revolutionary American history has marked it as a genuine "cradle of liberty." Every child knows that the Puritans came to this country because they were not allowed to worship in freedom in their own land, but the fact that in the Massachusetts colony they forbade any one not a church member from voting or taking any other part in the public affairs is not so generally known, and this Old South Church was founded by twenty-nine members of the first congregation who seceded because of their disapproval of this stand. These twenty-nine members worshipped together, their wives and children not being permitted to join them until the General Council voted that "whom God had joined no man should put asunder." It was in the old church that Judge Sewall made public confession and repentance for the part he had taken in the witchcraft delusion; also Benjamin Franklin was baptized in the original church. The present building was built in 1730, Robert Twelves being the architect, and the church was built of brick laid in Flemish bond, the steeple continued up in wood 180 feet high. The church became the favorite place for holding mass meetings of the people of Boston, the first meeting being held in 1745 to pray for Divine intercession to prevent the destruction of Boston from a French fleet then on its way. Curiously enough, during the meeting the news arrived that the French fleet had been destroyed by a storm. It was in this church in 1773 that the Boston Tea Party was organized and in 1774 Bourgoyne's cavalry, the Queens Light Dragoons, used it for a riding school and one of the pews for a pig-sty. The building is not at the present time used as a church, but belongs to the women of Boston, who keep it as a sort of historical museum. The present interiors are as they were restored after the Revolutionary War, but the church is unchanged from its original condition.

THE OLD DUTCH CHURCH AT TAPPAN.

THE FIRST SETTLEMENT in Tappan was in 1640 by one Captain David Petersen de Vries who bought five hundred acres of land (which constitute now practically the whole town of Tappan) from the Indians on the fifteenth of April in that year. He called the place Vriesendaal, but in 1643 after he had built some buildings and secured some more settlers the Indians on second thought regarding the purchase burned the buildings and drove him and his comrades out. It was between twenty and thirty years after that before a permanent settlement was made and the original predecessor of this church was built in 1716, enlarged in 1778 and after being partly destroyed by fire was in the main torn down and the present structure erected in 1835. While the date of this church is somewhat late; the building is in character rather Colonian than Neo-Grec, and in spite of the date belongs distinctly to the Colonial period especially in the treatment of the windows, the lightness of the pilasters and cornice, and in the profiles of the moldings and general design of the tower. This is probably due to the fact that the building was copied very closely after the Cedar Street Presbyterian Church in New York City, long since destroyed. No architect, apparently, was employed, the necessary drawing being made by John Haring, the carpenter contractor, and William Ackerman, the mason. I have found in the case of most of the old churches which were rebuilt, that the movement to rebuild came from the dissatisfaction of the congregation with their then quarters; the ministers in few cases seemed to have had much to say about the rebuilding, either because they were such godly men that

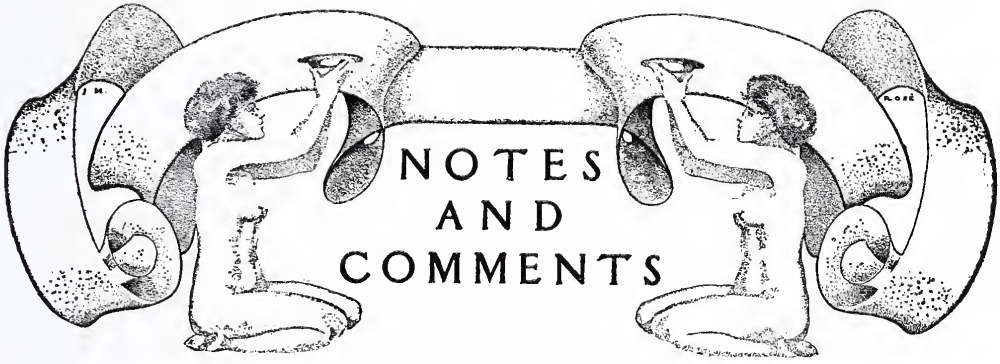


THE OLD DUTCH CHURCH AT TAPPAN.

earthly surroundings mattered little to them, or else, and more probably, because they lived in mortal terror of their congregation; who, it is true, were also often in just as much fear of them. A very old gentleman, who is still alive, remembers the beginning of the movement to build the new Tappan Church, when Dominy Lansing, who had just come as the minister, and was very dissatisfied with the dingy old building in which he had to conduct worship, preached from this text: "Is it time for you, Oh ye, to dwell in your ceiled houses, and this house of God lie waste." The congregation felt it was not time for them, and built the church, which stands substantially as when completed.

EDITOR'S NOTE.—The Early American Church Series began in the December, 1911, Number of The Architectural Record. The complete list of subjects published up to date are:

Bruton Parish	Williamsburg, Va.
First Congregational	Guilford, Conn.
First Congregational	Bennington, Vt.
St. Paul's	Augusta, Ga.
St. Peter's	Philadelphia, Pa.
Meeting House	Farmington, Conn.
Christ Church	Hartford, Conn.
"Old Swedes"	Wilmington, Del.
North & Center	New Haven, Conn.
Christ Church	Alexandria, Va.
Pohick Meeting House	Alexandria, Va.
Old Slip Meeting House	Hingham, Mass.
St. Peter's	New Kent County, Va.
St. Luke's	Smithfield, Va.
Old Meeting House	Lancaster, Mass.
First Presbyterian	Sag Harbor, L. I.
Meeting House	Springfield, N. J.
King's Chapel	Boston, Mass.
St. Michael's	Charleston, S. C.



EXHIBITION OF CALIFORNIA ARCHITECTS.

The exhibition of the Architectural League of the Pacific Coast, which was held in Los Angeles February 23d to March 15th, was of interest from several points of view. It was only the third exhibition to be held, and the marks of infancy were upon it in various ways. It was held in a department store, and on the ground floor at that, with an entrance directly from the street as well as from the store. Occupying such precious space, the exhibits were greatly overcrowded. Neither was there any discoverable system about their hanging. Exhibits of one man or of one subject were scattered all about the room, some of them so skied that it was impossible to read the legend. Also the works of two men—Myron Hunt and Elmer Grey—until recently in partnership, greatly predominated. But if these were the faults of infancy, the infant showed much sturdiness and promise for the future.

The rooms were so crowded that the newspaper estimate of an attendance of over 30,000 for the whole period, about double that of last year, seemed conservative. There was no way of telling exactly, for without charge for admission people wandered freely in and freely out, and no doubt many a shopper, with her mind not so much on elevations as on bargains, took a look. But even so, the attendance was highly significant and encouraging. It was the more so because the emphasis of the exhibition was on the domestic side—that side in which California architects are doing their most interesting work. The bungalow, sometimes very artistic and nearly always attractive, and the great mansion with its formal garden—an Italian villa stamped with American dollars, but still having possibilities—made up the bulk of the strictly architectural exhibits. A gallery was devoted to trade exhibits, and here also the domestic predominated—even to laundry tubs and like things which are dear to a shopper's heart. In fact, architecture was broadly interpreted on the ground floor, the decorative arts having a prominent place. There was also an interesting collection of architectural books, including some rare volumes; and sixteen sets of "one thousand dollar prize competition drawings" from San Francisco attracted a good deal of attention. The subject was an open air theatre and festival hall for a world's fair, and the prize—a year of study and travel—was won by a San Francisco lad. Another exhibit, interesting in its novelty, was a collection of photographs showing the work of Mrs. Hazel W. Waterman of San Diego, in restoring to its original beauty the famous Estudillo House, which visitors best know as "the marriage place of Ramona." It is an adobe structure, which, after falling into such sad neglect as to be actually dangerous, has been now rebuilt and planted in its old time splendor, and all this with such skill that in the photographs at least there is never a hint as to what is old and what is new. Finally, if the work of two men seemed unduly to predominate in the exhibition, it must be added that theirs was exceptionally good work.

IMPROVEMENTS FOR CALCUTTA.

Though Delhi is to be replanned, as an imperial capital, it is not to be supposed that the higher urban aspirations, so characteristic of these times, have not touched other Indian cities. Long before the Delhi project was made public, the radical improvement of Calcutta had been arranged for by the Bengal legislature. Open spaces, a system of new streets, and a housing scheme are included in a project of which the expense is variously estimated—with $27,500,000 as the minimum guess. It is interesting to note that by the legislation adopted last Fall these improvements are to be carried out under the direction of a body very similar to the local city planning commissions of American towns. This body, containing eleven members, is called a "trust," a title which to English ears is less fatal to popular approval than in America. To the Bengal government was given the appointment of the president and four other members. The corporation of Calcutta is represented by its chairman and three members. European commercial interests, as represented by the Chamber of Commerce, have the election of one of the two remaining members, while the other is chosen by the Bengal National Chamber of Commerce, which is Indian. A special court has been created to act on appeals against awards for property. Measured by financial outlay, the most important part of the improvement scheme is the system of new streets. These are to be "wide" roads, in order to facilitate transportation between the city and its suburbs, the present difficulty of such intercourse having been held responsible for the congestion of population which is so serious a feature of Calcutta life. A suggestion of the present conditions is afforded in the statement that to these new streets will be given a breadth of sixty feet.

FUNCTION OF A CITY ARCHITECT.

As a result of conferences between the public buildings committee of the board of supervisors of San Francisco and the board of advisory architects on the anticipated city hall and civic center, there has been proposed a reorganization of San Francisco's bureau of architecture which would be so complete as perhaps to mean the bureau's abolition. The plan advocated is that of inviting private architects to compete for public work. As an argument for such a change, the supervisors' committee is said to have found, on investigation, that the city's architectural work now costs about ten per cent. of construction cost, besides being so much behind as to involve long delays. It has been suggested that if a change is to be made, it were best to have the office of city architect rendered one of inspection and supervision rather than of creative performance and rather than abolish it altogether. This would seem a very proper change.

LOS ANGELES ASTIR.

Civic enthusiasm in Los Angeles has been spread over a number of projects so that winter tourists in buying the local papers have been bombarded with civic improvement items of one kind or another every day. The condition was the more notable because the city is so deeply involved financially in the water, harbor and power projects that it really was not in a position to do much. Four schemes especially were to the fore—all of them items in what is known as the Robinson plan. In the midst of the agitation Charles Mulford Robinson himself arrived. He was in the city only four days; but the papers made the most of his presence, and in that time the finance committee unanimously recommended to the city council that it accept the offer of a local banker to buy the Normal School site for $500,000, and hold it for the city until the city should be in funds to take it over without profit to him; the streets and boulevards committee recommended that Vermont Avenue be widened to one hundred and twenty feet; the council agreed to allow the people to vote, at a May election, on the sale of the present city hall and the construction of a new one on the proposed civic center site; and steps were taken for the building of a parkway through a picturesque ravine connecting Los Angeles with Pasadena. As each one of these projects had enthusiastic champions, there was a good deal doing. In addition, the largest woman's club—its membership exceeding twelve hundred—attempted to stir up the council to secure expert advice on the apportionment of street width between paving and parking. But the women were interested in the other projects as well as in that, and as Tetrazzini took a hand in the civic center campaign in San Francisco, it is in-

teresting to find that from Los Angeles a long telegram was sent to her by the organized women who knew her interest. It read in part: "Council and business men met in city hall chambers to consider action on Normal School site for construction of municipal building, including auditorium, art gallery, music hall, library. Charles Mulford Robinson, 'city beautiful expert,' in city, approves such action." The Municipal Art Commission, which had been officially responsible for the Robinson plan, backed all the projects, as did the civic clubs. In fact, when the finance committee of the council held a public hearing on the purchase of the Normal School hill, only one feeble voice was raised in protest in a meeting which was crowded in spite of a short notice. The architectural development of that hill, in the very heart of the city, with beautiful little Central Park in front of it as a forecourt, presents so remarkable an opportunity for a city as large and closely built as Los Angeles that the decision to develop it is of more than local interest.

HALIFAX CONSULTS HER ARCHITECTS.

A town plan for Halifax has been secured by means of a competition of local architects. Eight sets of plans were submitted in response to an individual's offer of three prizes, of a hundred guineas, thirty guineas and twenty guineas respectively. Professor Adshead of Liverpool has made the award. Very probably an excellent plan was secured by this means, but it will be interesting to learn what results from the plan. In an American town, the chances would favor considerable discussion and no action, the jealousy of unsuccessful competitors—or the loyalty of their friends—and a lack of popular confidence in local ability being probably sufficient to prevent definite action. Perhaps they manage things differently in Halifax.

A CITY'S ARMS.

Recent action by the Islington Borough Council, England, in refusing to permit the use of the borough arms on a program of entertainment, has been heartily endorsed by "Municipal Journal" of London. It is quite too common, says the paper, for the arms of a town to be used in connection with advertisements. The like criticism could not be justly made in the United States, where the city arms might well be used more than they are. If the exterior of all municipal public buildings bore the arms, and if they were stamped on every public utility fixture municipally owned, on the apparatus now marked with the city's initial plus P. W., on gate posts, and on bench, there would be more incentive to good design and perhaps more of civic consciousness. It may be said that few American citizens have arms. They all have seals, and with us the seal would do as well as arms. If aspirations be more aristocratic, it may be noticed that most English towns have adopted their arms in honor of their founder or of some especially distinguished son—as Birmingham bears the arms of the barons of that name; Manchester, of the Byrons, etc. What American town has not a benefactor, or distinguished son—or boss?

TYPICAL STREET PROBLEMS.

An extremely interesting city plan report is one which comes, though under another name, from Worcester, Mass. Issued in book form, and with photographs, maps and diagrams, it is entitled, "Final Report and Recommendations of Commission on Relief of Street Congestion." The interest in the report, outside of Worcester, must be rather in the history of its making and its general character than in the specified recommendations.

Briefly, then, there was created by act of the common council and board of aldermen a commission on the relief of street congestion in July of 1907. It was to serve without pay, but was to be allowed all necessary expenses for assistance, etc., and it was to consist of three aldermen, five councilmen, and six citizens to be appointed by the mayor, subject to confirmation by the council. These citizens, however, were not appointed, and six months later the order was rescinded by the authorization of a new commission, to consist of the presidents of the board of aldermen and common council, ex-officio, and of eight citizens appointed by the mayor and confirmed by the council. In March, 1908, the new mayor made the appointments. In so doing he sent a letter to the council in which he expressed the opinion that "Probably no more important appointment will be made during the present municipal year than the members of the commission," and he congratulated the municipality on the fact that "men of such ability and standing" had consented to serve on the new commission. These men included an architect, a construction engineer, a builder,

a civil engineer, a trained legislator, a financier, a lawyer and a business man.

The nominations were confirmed and the appointees promptly met and organized, making Arthur W. French, chairman, and Clellan Waldo Fisher, secretary. The members were divided among half a dozen sub-committees.

Though the commission was authorized to supplement its recommendations by the preparation of estimates of cost and an apportionment of betterments, it early determined not to undertake that very considerable labor, since the creative order did not bestow on it the power to carry any improvement into execution. With costs constantly changing, it would be futile, the commission believed, to estimate costs until the work was imminent. In two other directions also the commission felt itself hampered, or at least limited as to the recommendations it might make. One was the city's lack of the right to excess condemnation—a right which it has been privileged to seek only since last November, when the State constitution was amended in that respect. The other limitation, imposed by the commission's own modesty, is ascribed to the rise of "a new art or science, that of city planning." On this point the commission says: "Starting in Europe, it has spread to America, and has taken a place beside engineering, architecture and landscape architecture—with its own literature and periodicals and its skilled experts." The commission consequently felt that "such an extensive and complete study as it at first thought to give to Worcester should be made by those having expert fitness for such a task." It states the belief that an expenditure of ten thousand dollars to secure such recommendations and plans for Worcester "would be money well spent." Nevertheless, the commission did devote a great deal of time and study to the city; and while, in response to the specific implication of its title, its particular recommendations are largely confined to the business district, where alone congestion of traffic exists, it strongly urges the construction of an outer circumferential street and the necessity for the city's more complete control of all street platting in new sub-divisions. To the lack of that control in the past is ascribed much of the present congestion, and the commission adds: "On the same principal that the city now controls the sanitation and fire hazard of private property, it would seem possible and proper that it should control street development, which is a matter of the greatest public importance." The commission urges, in this connection, that "the city, through its street and engineeering departments, should formulate in advance a comprehensive plan, in outline at least, along which all street development should be carried in those sections of the city at present only partly developed."

In taking up specific recommendations for street changes in the business section, the commission calls attention to three "theoretical principles." One is that natural centers, or foci, should be connected in the most direct manner possible. A second is that streets should be given a width adequate to modern needs. The third is the degree of relief which may be secured on narrow streets by a restricted use of them. The commission pleads for the community point of view, instead of that of private interests, in passing judgment on its recommendations; and it answers the criticism of excessive cost, both actual and in comparison with what might have been done a few years ago, by pointing out the anticipated benefits and the indisputable fact that the cost now will be less than a few years hence. Because Worcester's problems are typical, and because their discussion by local men is sane and conservative while broad in its grasp of principles, other communities will find the report suggestive and stimulating.



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Managing Editor
RUSSELL F. WHITEHEAD

Contributing Editors
HARRY W. DESMOND
HERBERT D. CROLY
MONTGOMERY SCHUYLER

RALPH REINHOLD, Business Manager

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ENTRANCE DETAIL—COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
WICKATUNK, N. J. JOHN RUSSELL POPE, ARCHITECT.

THE ARCHITECTVRAL RECORD

JUNE, 1912

VOLUME XXXI NUMBER VI

THE FARM HOVSE "DE LVXE"

COVNTRY SEAT OF ROBERT J. COLLIER, ESQ.

JOHN·RVSSELL·POPE·ARCHITECT

OF LATE years one of the most prominent developments of American domestic architecture has consisted in the increasing number of successfully individual houses. There was a time when American architects were trying hard to design extremely individual residences, but the harder they tried the more completely they failed. They succeeded more often in being eccentric than in being individual. There succeeded a period in which the majority of the more expensive American houses were pretentious, formal and on the whole academic. This period was an improvement upon the one which preceeded it, but its value consisted less in its results than in the schooling which our architects obtained in the understanding and handling of certain essential traditions of form. At the present time, while there are many very eccentric and many very formal houses still being erected, we have a handful of architects whose work is neither academic or eccentric and who can add vitality and propriety to the unconventional use of certain traditional styles. They have attained to a genuine individuality of expression, and their houses, when they are come upon unexpectedly, are capable of giving the sympathetic observer an actual shock of surprise and pleasure.

Mr. Robert Collier's house at Wickatunk, New Jersey, designed by Mr. John Russell Pope, belongs to this class. It consists of a spacious but unpretentious wooden building, two stories and attic in height, and long enough to produce the effect of being low. In a certain sense its design follows the tradition of those shingled villas which Messrs. McKim,

Mead & White and other firms used to design twenty-five years ago; and it has somewhat the same quality as these houses. But it belongs to a better general type. During the last twenty-five years the well-to-do American has ceased as a rule to buy a villa plot by the seashore and prefers to build his country place in the interior and to set up as some kind of gentleman farmer.

Mr. Collier, among others, has evidently wanted his country dwelling to belong to the general type of simple, unpretentious farm houses; and Mr. Pope has succeeded in giving to his country seat precisely this character. It is merely a commodious farm house, delightfully placed in an orchard and without any pretense even of being unpretentious. It is the real thing, bearing in all its details the evidence of skillful and beautiful design, and as well adapted to its surroundings as it is individual and self-possessed.

On its entrance side the building is, as I have said, long, low and almost unpretentious in its lines. It is entered not by means of a porch, but by a spacious recess taken out of the body of the building and running up through two stories to the line of the roof. The timbers of the roof are supported by five tall, square, slender columns, whose effect is both light and graceful. They have the advantage of being and of looking like real wooden supports, and not of being designed in wood to imitate stone. Another architect in a kindred house on the Hudson has used similarly porportioned columns to serve a similar purpose, but Mr. Pope has been rather more successful in making his columns look like what they are. From this recess, a visitor enters a spacious stair hall, which runs through the building and which leads both to the important living rooms and to a covered porch on the far side of the house. The stair hall and the rooms are designed to harmonize with the scrupulous simplicity of the exterior.

On the other side of the house its outline loses the monotony of its entrance side and becomes much more striking. In planning a residence of this kind, which must look like a farm-house, while at the same time being much more spacious and accommodating than any actual farmer would need, a good deal of ingenuity has to be exerted in order to prevent it from looking too big for its type. Mr. Pope has met the difficulty by adding a bold extension to the middle of the far side of the building. To this projection is added a covered porch, running up through two stories, the slant of whose roof is tied in with the roof of the extension. The ceiling of the porch is carried by eight square, slender wooden columns, similar in design to those on the front of the building. The effect of the extension and the porch is exceedingly picturesque. The porch itself may have the disadvantage of being a good deal exposed to wind and rain for an out-door room; but presumably it is only intended for use during that part of the day when the sun is shinning elsewhere. The recessed out-door room on the entrance side is doubtless intended both to live in and as a means of entrance, for the comparative isolation of the place would make such an employment possible.

It is is very much to be hoped that many more well-to-do Americans will want the kind of house which Mr. Robert Collier has built and that they will be equally happy in their choice of an architect. H. D. C.



ORCHARD APPROACH—COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
WICKATUNK, N. J. JOHN RUSSELL POPE, ARCHITECT.



ELEVATION LOOKING TOWARD THE OCEAN—COUNTRY SEAT OF ROBERT J. COLLIER, ESQ., WICKATUNK, N. J.
JOHN RUSSELL POPE, ARCHITECT.



THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
WICKATUNK, N. J. JOHN RUSSELL POPE, ARCHITECT.



THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
WICKATUNK, N. J. JOHN RUSSELL POPE, ARCHITECT.



THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
WICKATUNK, N. J. JOHN RUSSELL POPE, ARCHITECT.



PORTICO—THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
WICKATUNK, N. J. JOHN RUSSELL POPE, ARCHITECT.



PORTICO DETAIL—THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ., WICKATUNK, N. J. JOHN RUSSELL POPE, ARCHITECT.



STAIR HALL—THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
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LIBRARY—THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
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DINING ROOM—THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ.,
WICKATUNK, N. J. JOHN RUSSELL POPE, ARCHITECT.



Drawing Room.
THE COUNTRY SEAT OF ROBERT J. COLLIER, ESQ., WICKATUNK, N. J.
John Russell Pope, Architect.



A FLORENTINE HOUSE IN THE MIDDLE AGES

THE DAVIZZI-DAVANZATI PALACE

BY WALTER BOMBE

THOSE WHO WOULD LOOK FOR BEAUTY still clinging to what the wreck of time has left of old houses must now betake themselves to some one of those few remote corners of these old cities where the destructive fury of the demolisher's pick—wielded in the name of a wrongly understood modernity, new needs, and a new and barbaric taste—has not yet fallen upon these vestiges of the past. Few indeed are the spots now—oases in the desert—that have escaped the pressure of the real and imaginary needs urged in the cause of the public hygiene, the modern citizen's demands for comfort, and the insatiable love of gain on the part of greedy speculators; but still it is this very scarcity that makes them even more precious, and seems to enhance their beauty and charm.

In the still night, when the calm moonlight from the silvery crescent riding high in the starry sky, falls upon the royal banks of the Arno reflecting strange shadows from palaces and towers in the mirror of water, here in the heart of old Florence we can still feel the beating pulse of a mighty life that once was; listen still to the voice of a dead people, and in the dreamy reality of the surroundings make the days of a by-gone age live again. Here, around the piazza S. Biagio, in the labyrinth of streets and winding alleys running off from the piazza Peruzzi, where the bright offensive glare of the arc-lights falls less hurtfully on the eye, while the ear is no longer deafened by the sound of the clanging tram-bell, and the noise and stir of the hurried life of modern days is less intense, there come to the studious observer pleasing visions of times that were, as he realizes that here may still be felt the lingering throb of that vigorous life that was once the soul of Tuscany in the day of her

greatness, grandeur and predominance. Here the fourteenth century houses of stern and sombre aspect, and the black turretted palaces of the days of the Renaissance still recall the glories of the past, the bold heroic deeds, the fierce and desperate internal struggles, the flourishing commerce, and the envied fortunes of the city of Florence, which first in the brilliant splendour of republican liberty and then in the tranquil glory of the Medicean principality, rose to such fame and power and beauty as to surpass all, or nearly all, the other cities of the beautiful peninsula. But alas, to gaze on the interior of these ancient buildings, whose external aspect can evoke such charming visions of the past, is but too often to experience a sad and sorrowful awakening from a complete illusion.

The loggias are for the most part walled up, and walled up, too, or obstructed, are the high windows of the large halls, broken up and altered to suit the modern citizen's modest needs, while in the course of time, all or almost all the antique furniture has disappeared, finding its way, to a large extent, into foreign museums and private collections. Even the pieces of this old furniture still existing in foreign museums are mostly and notably spoiled by cleaning, waxing, restoring or capricious addition. Solely by studying and comparing the chronicles, the romances of ancient authors, letters, and the information that may be gathered from the inventories of the time (documents to be found in thousands in the Florentine archives), and then attentively considering places and surroundings as pictured in frescoes, pictures, reliefs, miniatures and old prints, can we succeed in forming a clear idea of the real appearance of old Florentine furniture.

II.

The Via Porta Rossa was one of the chief streets within the oldest boundary walls of the city of Florence. There a great many powerful families had their home. Up to the time of the barbarous destruction of the buildings forming the ancient centre of the city, this street still bore the purely characteristic features of the Middle Ages. To-day nought meets the eye save the spoiled remains of its palaces. The demolisher's pick has beaten down the fine Bostichi tower that faced the Loggie of the Mercato Nuovo, and the strong tower of defence of the Bosi and has destroyed the superb palace that the Cocchi-Compagni bestowed on the church of Or San Michele, as well as the ancient habitation of the Davanzati with its beautiful Gothic windows. All that is left to testify to the splendour that is gone are the Foresi towers (Via Porta Rossa 20), the tower of the Monaldi over the Torrigiani palace, and the sombre imposing palace of the Davizzi Davanzati.

The Davizzi family was one of the most ancient of those that dwelt in the Via Porta Rossa. Their palace stood with its façade in the Via Porta Rossa, and the rear in the Via di Capaccio, and according to mediæval custom was divided among several members of the family. Andrea, son of the then late Domenico di Gherardo Davizzi, gave up half of the palace to his uncle Giovanni on the 8th December, 1424, making as a condition that the latter should not have the right to sell it. Lorenzo di Gherardo, who owned the palace in 1498, describes it in the census in these terms, "a palace with three wool warehouses." During the 15th century, the Davizzi were still rich and powerful, but at the beginning of the 16th century the family fortunes began to decline, and in 1516 the Davizzi were obliged to sell their palace to Onofrio Bartolini, an apostolic prothonotary.

Fortunate speculations had raised the Bartolini to the position of one of the most powerful families of that day. When the new palace that Baccio d'Agnolo built for them was finished, they rented the Davizzi house to the "Ufficiali della Decima," a magistracy that levied a heavy tax on the Florentines. The numerous inscriptions on the walls of the house are undoubtedly the expression of dissatisfaction on the part of more than one tax-payer, made during the hours of waiting at the entrance to the offices. In 1578, the palace



FAÇADE—THE PALAZZO DAVANZATI, FLORENCE, ITALY.



DETAIL OF ENTRANCE COURT—THE PALAZZO DAVANZATI, FLORENCE, ITALY.



ENTRANCE COURT AND STAIRS TO SECOND FLOOR—
THE PALAZZO DAVANZATI, FLORENCE, ITALY.

passed into the hands of Bernardo Davanzati, a translator of Tacitus and author of a history of schism in England. He, also, came of an ancient family of the Florentine nobility, which up to the end of the days of liberty had given eleven gonfaloniers and forty-four priors to the Republic. Messer Giuliano di Niccolò Davanzati was several times the Florentine ambassador at the court of the pope, Eugène IV., and was made knight of the Golden Spur at the inauguration of the Cathedral, when, too, he had the right conferred upon him to add to his arms the papal tiara and keys. The coat of arms that was transferred from the ancient dwelling to the Davizzi palace, bears the following inscription: Ex privilegio Eugenii IV. D. Julianus Davanzati Eques.

The Davanzati, who at the time of the siege of Florence were the most ardent champions of the Republic and of liberty, were exiled after the fall of the city. Their glorious history was brought to a close in 1838, when the last descendant of the family, Carlo di Giuseppe Davanzati, threw himself out of one of the windows of his palace and thus perished.

After the death of the last of the Davanzati, the palace was divided into a large number of apartments which became occupied by tenants from the common classes. It was picturesque but sordid and neglected till, some years ago, it was purchased by Prof. Elia Volpi who purposed restoring it to its former state. The long work of restoration, carried out, too, in minute particulars, was accomplished by M. Volpi, with the aid of the painter Silvio Zanchi, in a manner worthy of our admiration. In the face of incredible difficulties, the whitened rough-cast that covered the walls was removed, and the ancient mural decorations laid bare, the paintings on the ceilings were completed, and everything not belonging to the original building pulled down. And at this day the Davanzati palace is the only Florentine dwelling of the 14th century still standing intact.

The façade of the palace is built entirely of solid blocks of stone; roughly-squared and embossed stones reach up to the first floor, then above are polished blocks. Only the uppermost story, an after construction, is of brick. The sombre aspect of the palace is relieved by three great portals and the segmental arches over them and over the corresponding windows of the three stories. Over the first story are seen the Davanzati arms which some would attribute to Donatello; though a glance at the baroque border is sufficient to convince one that these arms were sculptured after Bernardo Davanzati had become proprietor of the palace in 1578. The vestibule takes up the full breadth of the facade. Three openings or machicolations served, it is said, for defence; we believe, however, that they were simply intended as communications between the first and ground floors. The three escutcheons seen in the frescoes opposite the three portals remind one that the palace was built by the Davizzi. In spite of the severe simplicity of outline, the court harmonizes so well with the rest of the structure, that it would be impossible to find another in Florence to bear comparison with it. Five columns with bizarre capitals of projecting male heads, uphold the structure with the outside staircase and the open communications between the different rooms. The "Marzocco," the city emblem, guards the entrance to the stairs. Over the door of the principal stair there is an old fresco representing Saint Christopher with the Infant Jesus giving him His benediction as He leans on the giant saint's shoulder. The large hall on the first floor has still its ancient painted beam-crossed ceiling.

The large chimney-piece is decorated by figures of children dancing, admirably executed after the style of Michelozzo. The panes of the five large windows are framed in lead, and the shutters studded with nails. In the middle of the hall stands a huge 16th century table with antique legs shaped at their extremities like lions' paws. Stools, Savonarola X-shaped chairs, a richly sculptured and inlaid throne, a large vestry wardrobe, and a magnificent piece of Flemish tapestry complete the furniture.



Principal Salon—First Floor.
THE PALAZZO DAVANZATI, FLORENCE, ITALY.

In the next room, called the room of the Parrots, the gaze is attracted by some ancient mural paintings, and in these decorative designs parrots are seen in the spaces between intertwining ornamental bands; above there is a frieze of trees, over which are arches painted on the wall.

Another room is called the Peacock room, a name taken from the chief design in the mural decoration. On the frieze are to be seen the arms of the Davanzati family and of other families allied with them or related to them.



Hall.
THE PALAZZO DAVANZATI, FLORENCE, ITALY.

A similar kind of ornamentation is seen in the other rooms of the palace, and is to be found in a great many houses once belonging to Florentine citizens of the Middle Ages. When the ancient "Centre of Florence" was destroyed, the museum of S. Marco saved several fragments of mural decoration, and thus those who are curious to see them may be afforded a sight of some interesting relics. The lower part of the wall generally bears designs of a geometrical character. The basis often consists of a net-work of squares and triangles, though at times there are polygons too, or stars. The favourite design of the 14th century is the quadrilobe. The predominating colours are blue, green, red and white. Very often the family arms are painted inside the quadrilobes. The manner in which the problem of the cornice is solved is worthy of observation. This cornice is formed by an architrave like that of an ancient temple, and ornate with indentation, or again of pointed arches with brackets or rings below, supporting a curtain hanging from a wooden bar. The whole of this is but painted on the wall, yet we can readily believe that this system of decoration was really effective to a certain degree in producing the illusion at which it aimed. Where the wall is broken by a door or a window the painted hanging is depicted drawn aside like a real drapery.

In the place of arms, figured representations, for the most part of little value, are often found in the quadrilobes, as

for instance, the scenes in a room of the palace of the "Arte della Lana" representing the working of wool. Some of them, however, are charming, as in the case of one from the house of the Teri, depicting in delightful manner the legend of Tristan and Yseult. This latter is now preserved in the museum of S. Marco. A very important element of mural decoration in Florence during the Middle Ages consists of painted porticoes with trees appearing beyond a grating, and flying birds here and there to give reality to the scene. This type of decoration must have been very common; several instances of it are seen in the Davanzati palace and in the fragments at the museum of S. Marco, and again, out of Florence, in the palace of the cardinal Branda at Castiglione d'Olona, near Varese, such decorations, attributed in this case to Masolino, are to be noted. The most interesting fragments in the museum of S. Marco come from the ancient Davanzati palace, now destroyed, and from the habitations of the Sassetti and the Rondinelli. Often there is but a general outline in few colours, intended to produce an effect when seen from a distance. Although such painting had no pretension to artistic ornamentation, as a whole it creates a pleasing and lively impression that brings to mind certain mural paintings in Rome or at Pompeii. This kind of decoration appears only towards the end of the 14th century, and is found running through the ornamentation of buildings and edifices of the Renaissance period.



The Dining Room.
THE PALAZZO DAVANZATI, FLORENCE, ITALY.

In the churches and public palaces, as for instance, in the palace of Arts, this kind of geometrical mural decoration is adopted. At the palace of the Bargello, and also at Santa Trinità, where the decorative paintings are certainly not all modern, we find entire walls covered with geometrical figures and quadrilobes. Very interesting is the Davanzati chapel at Santa Trinità, which contains the celebrated tomb of Giuliano Davanzati who died in 1446.

III.

A picturesque and very steep stair leads us to the second floor, which seems to have been inhabited by other members of the family, by Francesco di Tommaso Davizzi, towards the end of the 14th century, who in 1395, according to Passerini, married Catelana, eldest daughter of Alberto di Bernardo Alberti. The arms of the Davizzi and the Alberti are still to be seen in a room on this floor. The name of Francesco di Tommaso has come down to us merely because he took part in a conspiracy against the powerful Maso degli Albizzi and was beheaded in 1400.

The walls of the great hall, formerly hung with cloth, are now bare and devoid of ornament. Precious pieces of ancient furniture, among them a large piece of Flemish tapestry, give an idea of the richness and magnificence of a 16th century hall. More charming still is the nuptial chamber. The bed, set in the post of honour, and surrounded by chests, is the only important piece of furniture in the room. On the wall there is a tabernacle with the Madonna; sculptured wooden chairs stand around an oaken table, and here and there are chandeliers of wrought-iron;—the usual characteristic furniture of a nuptial chamber of the Renaissance period.

The walls are very richly decorated. The manner is that usually followed. There is a cornice with round arches and ornamental indentation, there are the arms of the Davizzi, the Alberti, and other families bearing them relationship, and between the slender columns of the arches painted on the wall runs a frieze in a series of frescoes depicting a story of love, of adventure, and of death. Below, hanging from rings, there are the rods, cords, and curtain. There can be no doubt that this decoration was wrought for a Davizzi and an Alberti, as is shown by the escutcheons of the two families seen in the frieze, and the main design of the hangings, which consists of chains running in crossed diagonals as in the arms of the Alberti. These paintings were made, perhaps, at the time of the marriage of Francesco di Tommaso Davizzi and Catelana degli Alberti in 1395.

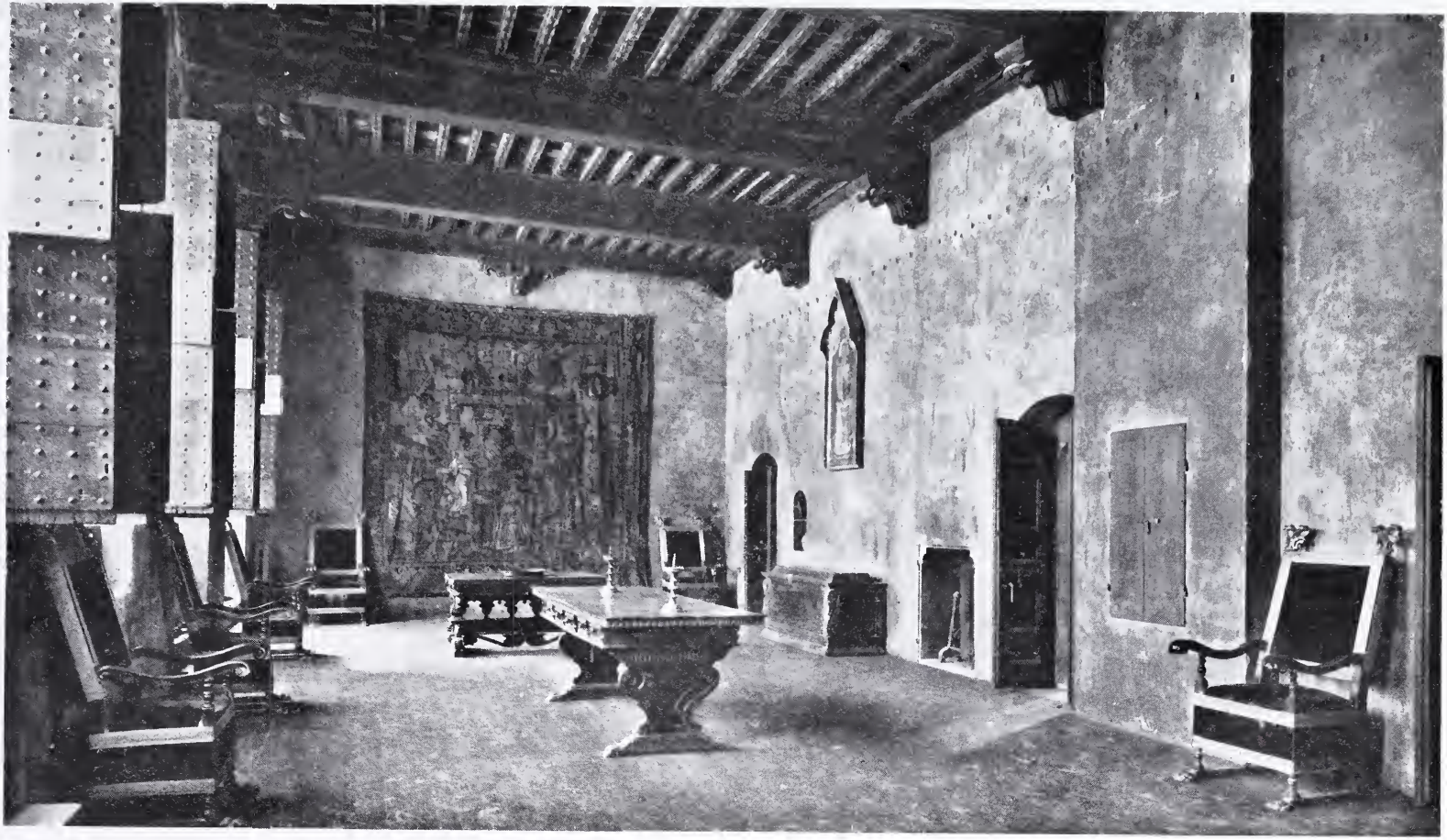
The story itself, here told in colours in the paintings arranged after the manner of a frieze, has remained an enigma up to the present time.

Prof. Hermann Suchier, of the University of Halle first set me on the right way to solving it, when—almost at the same time as Dr. Biehl—he pointed out to me a French romance, the story of the Dame de Vergy, as the source of the interesting series of paintings. But, as Prof. Suchier justly observes, the numerous editions of this story do not agree very exactly with the series in question.

The romance of the Dame de Vergy was treated in different ways according to the age, not only in painting and sculpture, but also in verse and prose. Its precise origin is unknown. Gaston Paris places it about 1280, Gaston Raynaud between 1282 and 1288. The latter, to whom we owe an edition of this ancient romance with textual criticism, gives a list of fifteen texts dating from the 14th to the 16th century.

It is noticeable that in nearly all, the "Dame de Vergy" has become changed into the "Dame du Vergier," the chateau of Vergy in Burgundy having been forgotten. The great number of manuscripts is a proof of the favour which this story by an unknown poet of the 13th century enjoyed. It is mentioned by the writers of the 14th century; for instance, Boccaccio (The third day. Tale 10), says: "Diones and Fiammetta began to sing of Messer Guglielmo and the Lady of Vergy." The romance was translated into Dutch, German, English and Italian.

In her Heptameron, published by Claude Gruget in 1549, Margaret of Angoulême, queen of Navarre, has left a particularly interesting version of the romance which contains some notable changes. Bandello's version, written some time during the first half of the 16th century under the title of La Dama del Verziere, differs too, on numerous points, from the story as told by the unknown poet of the 13th century.



MAIN SALON — SECOND FLOOR — THE PALAZZO DAVANZATI, FLORENCE, ITALY.

At a later time, on looking over again the ancient French and Italian romances with the kind co-operation of Prof. Pio Rajna, I came at last upon a manuscript (Cod. 1733) at the Riccardiana Library in Florence entitled Rime Diverse, in which a romance by an unknown popular versifier is to be found (f°. 112), written in characters belonging to the end of the 14th or the beginning of the 15th century, and entitled "La storia della donna del Vergèr e di Messer Guglielmo, piacevolissima chosa! Now, the text* of the Florentine rhymer often corresponds even down to the smallest details to the paintings in question. The painter of the frescoes, however, has depicted only the more striking scenes, neglecting some that are less important.

The poet is much superior to the painter. A learned young German, Lorenz, acquainted with the romance through the Bongi edition, believes this poet to be the Florentine, Antonio Pucci (about 1310-1390) a composer of romances and chivalric poems which he himself, like the story-tellers, often recited for the entertainment of the public. His subjects came to him in different ways. For the most part they came indirectly from France, being introduced into Tuscany by pilgrims, travellers, and others. Like a true popular poet, Pucci interprets his subject freely, grafting on to it popular traditions of all kinds, and making his personages speak like the people. His language is simple, often bald, but is not wanting in a certain pleasing naturalness.

An invocation to the Madonna forms the prologue to the romance of the Lady of Vergy:

O gloriosa, o Vergine pulzella
Io vo' la grazia tua adomandare,
E dire poscia una storia novella,
Per dare esempio a chi intende di amare.
Di un Chavaliere e di una Damigiella
D'un nobile legnaggio e d'alto affare,
Sicchome per amore ognuno morio,
E' il gran dannaggio che poi ne seguio.

(O virgin, glorious maid, first would I crave thy grace, and then a new tale relate of a knight and a lady of noble lineage and high estate, to warn those who would love, for each for love did die, and great was the ill that followed.) Then follows the recital just as the painter of the nuptial chamber has depicted it.

The lady of the manor of Vergy invites the knight, Sir William, to follow her into her chateau (a). The door is guarded by the little dog that is thenceforward to bear their messages of love.

D'una chucciola facievano messagiera.
(Of a little dog a messenger they made.)

Never was aught so secretly hid as their love; rather would he and she have denied God and the saints than avow their cherished secret. They swear it yet again (b).

However, the duchess of Burgundy, wife of the duke Garnier, seeing Sir William give feasts and tournaments like one in love, imagined that the "fete and glory" he thus made was for love of her. She is seen on her tower beckoning to Sir William (c); she comes down to speak to him (d). One day, the duke having set out for a neighbouring chateau (e), the duchess leads the knight into her chamber (f) and begins her entertainment with the noble game of chess (g). Whilst the young man is deep in a problem, the duchess draws him to her and steals a kiss from him (h). William wishes to free himself; he urges his faithfulness to his lord (i). The duchess now bears him deadly spite (j). Whilst William goes to the orchard ("Verziere") to meet his loved one, and by her side reaps the reward of his constancy (k), the duke returns. Before her husband the duchess acts the part of Potiphar's wife, she has scratched her face, loosened her hair and disordered her dress, and now accuses the young man (l). The duke is sceptical at first (m). At last he resolves to question William. The latter protests, and ends by declaring that he loves another woman. The duke bids him tell this woman's name or leave the duchy at the end of nine days (n). The

*The text in question was published in 1861 in a very whimsical manner, by Salvatore Bongi, appearing in the form of an opuscle dedicated to Giovanbattista Passano, of Genoa.

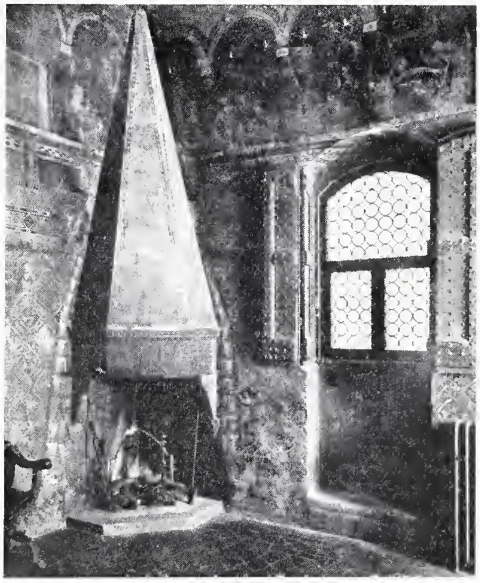
time expires, but the knight has not the heart to forsake his lady (o); in a last interview with the duke, "Sir," says he, "come with me and you shall see her." Hidden in a grove (p), the duke witnesses the meeting, in which the little dog plays its part (q). He regains the spousal chamber, but the duchess vows to withhold herself from him unless he punish the unworthy vassal with death (r). The duke laughs at her and in the end tells her the secret. The next morning, the duchess sets about preparing for a ball (s). During the festival she encompasses the lady of Vergy with a multitude of treacherous words among them such as touch upon secret love and the little dog accomplice (t). The lady of the manor feels herself betrayed, and doubts the loyalty of her lover. Wounded to the heart, she runs into a neighbouring room, seizes a sword hanging from the wall, and still clasping fast the faithful little dog with her left arm, she pierces her bosom (u). A servant who has seen the fatal blow (v) calls for help. The knight rushes forward and kills himself with the same sword (x). Then, while cries and lamentations resound on all sides, the duchess, avenged, bursts into cruel laughter. The duke draws the sword from the body of the knight and slays the guilty woman before them all (y). He himself then later takes the cross and departs for Rhodes seeking death in fighting with the infidels.

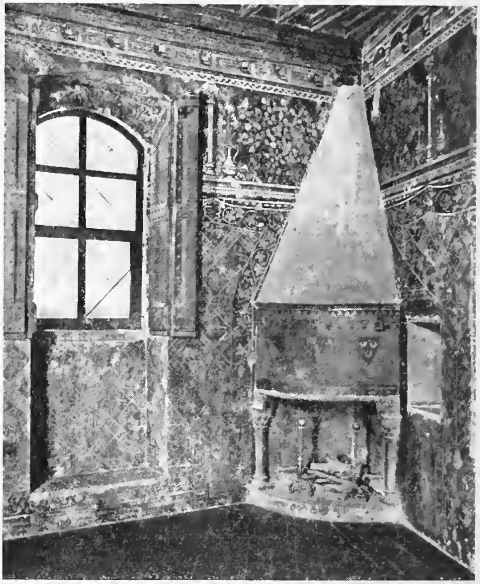
And what the painter has depicted for us, the poet, in an address to his hearers, thus ends:



Bed Room on Second Floor.
THE PALAZZO DAVANZATI, FLORENCE, ITALY.

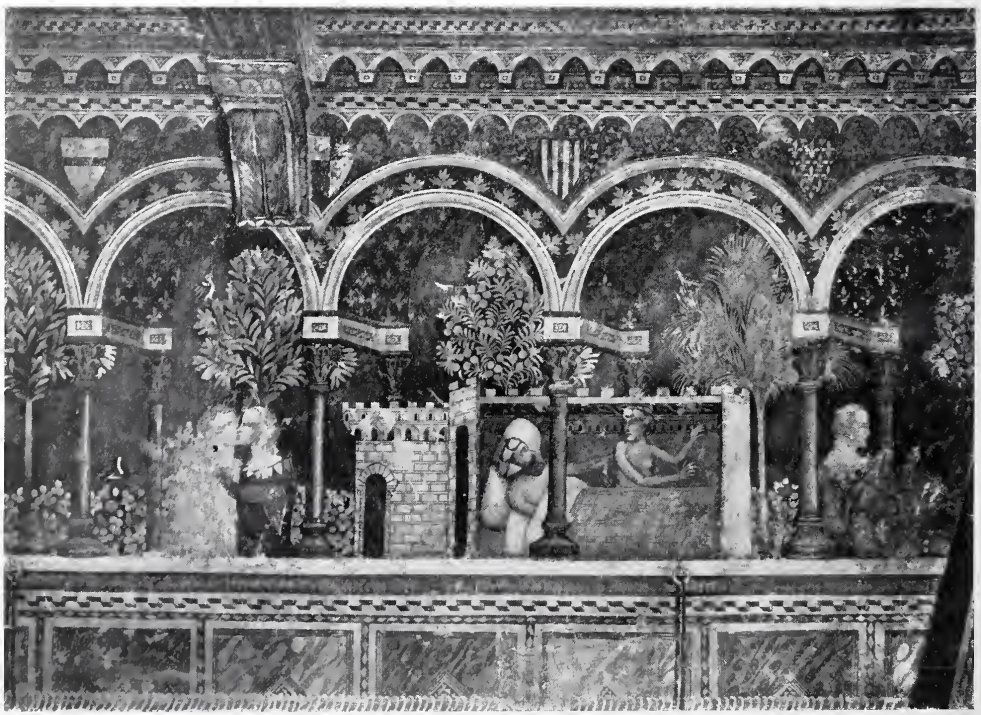
Signori, ch'avete udito il gran dannaggio
Ch'avvenne a due amanti, per malitia
Della Duchessa, benche 'l Ducha saggio,
Chom'io v'ò detto, ne fe' gran giustitia.
Onde poi si dispuose affar passaggio
Sopra de' Saracin per gran nequitia,
Elà' mori al servigio d'Iddio.
Al vostro honore è chompiuto el chantare
mio
Finita è la storia della Donna del Verziere.





THIRD FLOOR FIRE PLACE—PALAZZO DAVANZATI.

(Now people ye have heard the great ill that befell two lovers through the malice of the Duchess, though the wise Duke, as I have told ye, meted out stern justice. Then he determined to go and fight against the Saracens for their great



Detail of Bed Room Frieze.

THE PALAZZO DAVANZATI, FLORENCE, ITALY.

iniquity, and there he died in the service of God. In your honour is my song accomplished. Ended is the story of the Lady of the Orchard.)

Who was the painter of these frescoes? It is as yet an open question. Perhaps he might be found among the successors of Andrea Orcagna, for whose manner we think we have discovered a predilection in a certain feature in his drawing of curves, softened by a strongly-marked feeling for graceful and harmonious outlines in certain inclinations of the heads. His drawing is graceful and correct, but weak in the execution; he avoids as much as possible the portrayal of vigorous action, but in the lyric scenes, as in the charming episode of the game of chess, he displays all his talent.

The importance of these frescoes lies not so much in their artistic worth, as in their revealing for the first time the great influence that French rhymed tales of the Middle Ages had upon mural painting in Italy.



Stairs Leading to Loggia.
THE PALAZZO DAVANZATI, FLORENCE, ITALY.

IV.

A steep wooden stair leads up to the third floor and a loggia, whence a wide view is to be enjoyed, a view perhaps even more extensive than that to be enjoyed from the top of the campanile by the cathedral. The gaze travels over all the vast area of the surrounding city, now resting on the great buildings and high towers that stand out so imposingly from the rest, S. Maria del Fiore, Orsanmichele, the Arnolfo and the Badia towers, now sweeping away to the pleasant hills of Settignano and Fiesole, and as far as the distant mountains through which the green Mugello flows. Here, high up in this old palace in the quiet of the still summer nights when poetic remembrance of the past steals upon the mind, while the gentle murmur of the flowing waters of the Arno, falls upon

the ear, new and lively images of times long since flown, when the old owners of the beautiful house wrought and lived in this place, among their tapestries and ancient furniture, present themselves to the mind of the beholder who in the halls and rooms of this sombre palace has seen the ancestral life of long ages ago so faithfully recalled. Brighter and clearer, as they pass before the eye of fancy, pictured thus amongst the surroundings that were theirs, seem those solemn figures of oligarchs seated gravely at the management of public affairs, merchants busy in lucrative affairs of commerce, bankers with their warehouses dotted all over Europe, engaging in the most gigantic mercantile enterprises of the time, warriors who on fields of glory gave proof of the knightly qualities of their race and of the might of the commune of Florence.

Among these massive walls, those whose ears have caught the art, may still hear the voices of a dead people who like us lived and suffered, and felt the thrill of hate and love. Love is the theme of the strange stories of the frescoes we have but now described, symbol of tragedies once lived, of fierce passions that burned in the breasts of these proud and mighty ancestors; and the graceful romantic figure of the Lady of Vergy lights up with a touch of delicate and charming womanhood the picture of that age in the noonday of the renaissance in Italy, at times so dark and turbid with wrath and treachery, with cruel oppression and deeds of blood, yet nevertheless superbly grand in thought and the noble expression of the genius of a people sublime in letters and art.

And the restoration of this historic house, once the home of the terse and vigorous translator of Tactitus, a restoration carried out with such art and skillful care by Elia Volpi, redounds to the glory of Italy, while the palace stands like a marvellous embodiment of that daring poetic fancy that marks the Italian race.



Mantel in Principal Salon.

THE PALAZZO DAVANZATI, FLORENCE, ITALY.

PORTLAND, OREGON



THE TRANSFORMATION OF THE CITY FROM AN ARCHITECTVRAL AND SOCIAL VIEWPOINT



BY HERBERT D. CROLY

DURING THE DECADE from 1900 to 1910, that general division of the country which grew in population and wealth most rapidly was unquestionably the Pacific Coast. There were individual States in the mountain or southwestern districts, such as Idaho and Oklahoma, whose percentage of increase in population was greater than that of any of the Pacific states, but no general group of states were on the whole anything like as prosperous as those of Washington, Oregon and California. California contained sixty per cent. more population at the end of the period than it did in the beginning, and California was exceeded in this respect by both Oregon and Washington. These three states began for the first time in their history to reap the full advantage of their climate and their situation on the Pacific Ocean; and there can be little doubt that during the current decade they will do almost as well as they did during the past decade. Their agricultural and commercial prosperity are based upon permanent advantages of climate and location, which will become more rather than less powerful in proportion to the general expansion of the United States; and their industry will be benefitted both by the rapid development of water-power and the final utilization of the Alaskan coal deposits.

Of the four chief cities on the Pacific Coast two are old enough to have a history, while the other two have made their phenomenal growth practically within the last twenty years. The two that have a history are San Francisco and Portland. The history of Portland is more prosaic and less dramatic than that of San Francisco, but it extends over an equally lengthy period and it has been determined by similarly definite and permanent conditions. San Francisco is no doubt American enough, but it is American in an exotic way. Its commercial and social characteristics have been profoundly influenced by the character of its early population, by its exceptionally mild climate and by its traditionally close association with China and the South Seas. Oregon, on the other hand, has been American territory for more than a hundred years. The stream of immigration from the East was making its way along the Oregon trail long before gold had been discovered in California. The character of the immigration was substantially the same as that which settled Kansas or Iowa. It consisted essentially of pioneer farmers from the East or the Middle West, who hoped to better their condition by taking up new land in the Far West. Much of it was subsequently diverted to California, but a certain proportion flowed steadily on over the Oregon trail and subsequently over the Northern railroads, which took its place. Oregon, consequently, is substantially a Middle Western state transplanted to the Pacific Coast. It is homogeneous in population. It is predominantly agricultural in interest. It is Puritan in temper. At the same time its resources are unusually diversified for an agricultural state, and in the course of time its social and business life will be enriched by

a larger variety of commercial interests and agricultural pursuits than is that of any of the farming communities west of the Mississippi river.

Its early development was both stimulated and restricted by geographical and climatic conditions. It contained the channel of the one great semi-navigable river, which flowed from the coast mountains into the Pacific Ocean and this river determined both the location of its chief city and the character of its early business interest. From the beginning Portland merchants have been interested in the salmon fisheries, and in lumber. Both these varieties of business enterprise have proved to be prominent and profitable, and the city of Portland became during the seventies and eighties, not indeed a very big city, but an exceedingly prosperous one. It was remarkable for the solidity of its business structure, and for the large amount of accumulated capital. Its merchants were thrifty and unusually well-to-do and kept their capital chiefly in local enterprises. In the meantime the agricultural development of the state was hampered by the lack of railroad mileage and by the necessity supplementing the rainfall over a larger part of the state by irrigating systems. During the decade from 1890 to 1900 the needed railroads were not built and little was done by way of irrigation, and throughout these ten years the City of Portland like the whole state did not make the gain in population and business, to which it was entitled.

During the past ten years, however, the state has been coming into its own. More diversified farming has taken the place of the former wheat fields. The advantage of certain parts of the state for the raising of fruit has been appreciated, and an enormous development of fruit culture has attracted the attention of the whole country. The population which had increased only from 317,000 to 413,000 from 1890 to 1900, had become no less than 672,000 by 1910. And the more rapid expansion promises to continue. The agricultural resources of the state are only beginning to be developed. More railroads and more irrigation will produce similarly satisfactory results during another decade or two.

Portland as the largest city in the state, obtained more than its share of the general prosperity. Indeed almost half the total increase in population settled in that city and its neighborhood. In 1900 its inhabitants numbered about 90,000. By 1910 they had 207,000; an increase of 129 per cent. No other city in the country of corresponding size, except two other Pacific Coast cities—Seattle and Los Angeles—had done anywhere near as well. In 1900, Portland was exceeded in population by forty-one other cities. In 1910 it was exceeded by only twenty-seven other cities.

This enormous expansion of population and business has necessitated a correspondingly large amount of new construction. During the past ten years the aspect of Portland has been almost completely transformed. A very large number of new business buildings have been erected, and inasmuch as the interests of the city are rather commercial than industrial, these new business edifices are not factories or furnaces, but office buildings and warehouses. Portland is extraordinarily well equipped with house room for the transaction of its affairs. Indeed, unless we are very much mistaken, it is better equipped than is any city of corresponding size in the country, which is presumably a result of the comparatively abundant supply of capital, which is controlled by the business men of Portland.

Portland, moreover, unlike any other city on the Pacific Coast, San Francisco excepted, has an architectural history. It has been erecting comparatively large business buildings ever since the essentially modern movement in American architecture began late in the eighties. The different phases of that movement can be studied to better advantage in Portland than in many middle western cities of larger population. Many of its earlier buildings were, indeed, designed by eastern or middle western architects, and at the present time an unusually large proportion of them are still so designed. Some of its earlier buildings are of exceptional interest and merit, and deserve

a place of their own on any complete account of the development of American business architecture.

For one thing Portland is unusually fortunate in its post-office. Very few government buildings dating back over twenty years have as much unpretentious dignity as has this particular edifice. Occupying as it does a whole block, it has the advantage of an exceptionally generous site, and its situation thereupon enables it to be seen from the street under unusually advantageous conditions. The building itself is worthy of its location. While it contains several anachronisms, and in its cupola an obvious excrescence, it possesses on the whole both propriety and distinction. Post-offices are often difficult to design, because their architects have to combine a utilitarian purpose with something of the more than the utilitarian atmosphere, which properly attaches to government buildings. In the present instance the balance between these frequently conflicting claims has been well preserved. No private owner would waste so large a proportion of the site of a building and none would chose this kind of a structure for the carrying on of an essentially business purpose. But while its public ownership is written all over its situation and its façades, it is not a heavy monumental edifice, in which convenience has been sacrificed to architectural effect. Its interior is better lighted than would be the majority of office buildings in Portland, and an opportunity is provided for an unusually useful plan. Altogether it is very much like certain government buildings in Paris, and expresses the French mixture of common sense with a desire for some effectiveness of appearance.



THE POST OFFICE, PORTLAND, OREGON.
Edgar M. Lazarus and Government Architects.

Another old building of unusual interest is the Portland Hotel. This structure also dates from Portland's early years, when real estate was not very valuable and when a building could be planned on three sides of a large court.



THE PORTLAND HOTEL, PORTLAND, OREGON.
McKim, Mead & White, Architects.



SKETCH OF THE REMODELED NEW PORTLAND HOTEL.
Emil Schacht & Son, Architects.

A plan of this kind has many advantages, not the least of which is the pleasant and urbane aspect which it gives to a hotel. It was worked out by a firm of architects no less renowned than McKim, Mead & White. It belongs, of course, to the very earliest phase of work of that firm, before it adopted the Italian Ren-



OREGONIAN BUILDING.
Reid Brothers, Architects.

aissance as its source of inspiration; and apart from an ugly and uninteresting combination of material it is a peculiarly interesting example of their first phase. It is a pity that it could not be preserved in its original condition, but in a growing city like Portland the continued waste of



THE MARQUAM BUILDING, PORTLAND, ORE.



CHAMBER OF COMMERCE BUILDING.
D. L. Williams, Architect.



THE MEIER AND FRANK BUILDING, PORTLAND, ORE.
DOYLE AND PATTERSON, ARCHITECTS.



THE WELLS FARGO BUILDING, PORTLAND, OREGON. BENJ. WISTAR MORRIS, ARCHITECT.



SPALDING BUILDING.
Cass Gilbert, Architect.

space, which was devoted to the court in the original plan, was obviously too much to expect. The architects, to whom the planning of the alterations was confided, have done their work ingeniously and well. They have occupied the court with a twelve-story addition, which under the circumstances composes fairly well with the wings of the old building. In its new shape the Portland Hotel is certainly one of the most unusual and individual architectural designs in the country.

In the Marquam Building Portland has another extremely interesting example of one of the earlier phases of modern American architecture. While I do not know the precise date, it was erected evidently in the early nineties, and belongs to the same general period as the Monadnock Building in Chicago—to the period that is of the transition from the old masonry construction to the new steel cage. In its appearance the Marquam Building is rather gloomy and cheerless, like so many of the office structures designed under the spell of the Richardsonian Romanesque. But like others of these buildings it is an eminently respectable and powerful façade. It has no doubt all sorts of faults. For a building of its height and street-frontage, its vertical lines are ever emphasized. The whole façade would be very much pulled together by certain sa-



THE SELLING BUILDING, PORTLAND, ORE.
Doyle & Patterson, Architects.

lient horizontal divisions. Neither can the architect be congratulated on his method of emphasizing the corners and on his central pavilion. With all its clumsiness, however, the design affords evidence of a serious and intelligent attempt to tackle a novel and difficult architectural problem, and it assuredly deserves to be considered in any comprehensive account of the evolution of the modern American sky-scraper.

A greater contrast could hardly be imagined between the old serious sombre terial. Both in height and length it has become merely the duplication of a certain number of units. A few more stories could be added, or the front pushed along the street for another hundred feet without making any difference to the design or giving the architect any additional thought. The architect is occupied chiefly with two objects—one of which is to provide an abundance of light and the other to get the best results for the least money.

All of these Portland sky-scrapers are



NEW COUNTY COURT HOUSE, PORTLAND, OREGON.
Whidden & Lewis, Architects.

Marquam Building and some of the really up-to-date sky-scrapers of Portland. What a change has taken place during the twenty intervening years! In these contemporary buildings the old ruggedness and the old tendency towards experimentation in design has vanished. Light brick and terra-cotta takes place of the former dark red brick and heavy stone blocks. If stone is used it is light in color and flat in treatment, but it is very rarely used. The sky-scraper has become standardized in design and ma- disfigured by the requirement of the local regulations, which compel their owners to place fire-escapes on the outside of the buildings. In spite of this drawback a number of them are very good examples of the prevailing tendency towards clean, economical and business-like design. Take, for instance, the Meier and Frank Building, which was designed by Doyle & Patterson. The material in this case is glazed terra-cotta. The façade is divided vertically by fairly strong piers into sections each of



THE COMMERCIAL CLUB BUILDING, 5TH AND OAK STREETS,
PORTLAND, ORE. WHIDDEN & LEWIS, ARCHITECTS.



THE BOARD OF TRADE BUILDING,
PORTLAND, ORE. DAVID C. LEWIS, ARCH'T.



THE GEON BUILDING, PORTLAND, ORE. REID BROTHERS, ARCHITECTS.

which contains three windows. The piers are embellished with a certain amount of superficial ornamentation, which is well designed and adds to their interest. No attempt has been made to decorate the upper stories. All the old mistakes of over-ornamentation and inappropriate expression have been abandoned, and if the result is not fine or beautiful, it certainly is not unattractive.

Still better is the Spalding Building, designed by Cass Gilbert. In this instance the fire-escapes are pushed over to the ends of the frontage, and do not break up the façade to the same extent with a maze of confusing lines. The windows are grouped in pairs with a somewhat heavier pier in between, and the brick, of which the façade is built, is excellent in color and surface. The two top stories are separated from the rest of the front by a projection, and are made interesting by somewhat larger and deeper openings, and by an ornamental treatment of the up-rights. This arrangement is more successful than the corresponding treatment of the Meier and Frank Building. Altogether this particular sky-scraper is as good of its kind as any which has been designed during the past couple of years in any other American city.

Somewhat more ornate, but on the whole not quite as good is the Wells Fargo Building, of which B. W. Morris of New York is the architect. The design bears, indeed, the evidence of unusually careful and patient work. The brick is laid in patterns, the grouping of the windows is peculiarly successful, and the ornamentation has been applied with discretion and good taste. But the architect gains nothing from his weak and useless arches at the level of the second floor, and the treatment of the upper stories is ineffective and fussy. Altogether the



THE HEILIG THEATRE, PORTLAND, ORE.
E. W. Houghton, Architect.



BUILDING FOR OLDS, WORTHMAN & KING, PORTLAND, OREGON.
Albridge & Hunt, Architects.



THE MULTONOMAH HOTEL, PORTLAND, OREGON.
Gibson & Cahill, Architects.



RESIDENCE OF N. P. SORENSON, PORTLAND, OREGON.



RESIDENCE OF S. B. HEUSTON, ESQ., PORTLAND, OREGON.



RESIDENCE OF MRS. SOL. HIRSCH, PORTLAND, OREGON.
Edgar M. Lazarus, Architect.



RESIDENCE OF J. N. TEAL, PORTLAND, OREGON.
David Miller, Architect.

building looks as if the increased time and study, which had been devoted to it, were perhaps not worth quite as much as they cost. Nevertheless the Wells Fargo Building is one which any city in the country might be glad to have on its streets.

The recent commercial architecture of Portland affords an excellent illustration of the advantages which follow from the increasing standardization of that class of building in this country. The materials, forms and methods of treatment, which have been adopted, have been reached only after a long period of experimentation. Even an inferior architect, who knows the meaning of this process, can by virtue of learning its lessons, turn out comparatively respectable and decent buildings. At the same time the standards leave room for the better architects, with the advantage probably of a little more money to spend, to add certain refinements and embellishments to the general type, which will sufficiently distinguish their work. Portland is to be congratulated on the fact that its new business structures are as good, if not better, than are the average of those erected in the Middle West or in the East. If the prevailing level of design is maintained or improved during the coming generation, it will become a city which will possess in the mass the dignity and the solidity, which follow inevitably from an architecture based frankly on utilitarian considerations and limitations.

Like other large American cities, Portland has very few public buildings. The city is fortunate, however, in having secured a really excellent example of this type of structure. The new Court House of Multonomah County is not a large structure, compared to the county court-houses, which have frequently been erected elsewhere. But it is an unusually good illustration of a small court-house, which is monumental in effect, without possessing the practical inconveniences, which so frequently are to be found in buildings of that class. The general design is simple, clear, well studied and scaled, and distinctly pleasing in effect. It was designed by a firm of local architects, Messrs. Whidden & Lewis, and it justifies the statement that the county authorities in accepting their services might have travelled further and fared worse.



RESIDENCE OF W. C. BRISTOL, ESQ., PORTLAND, ORE.
E. C. Rappins, Architect.



SKETCH BY WILSON EYRE FOR A GROUP OF THREE HOUSES. SUGGESTING THE POSSIBILITIES OF A CO-OPERATIVE IMPROVEMENT OF THE SMALL COUNTRY OR SUBURBAN TRACK.

"BVILDING A HOVSE OF MODERATE COST"



THE FIRST ARTICLE



BY ROBERT C SPENCER JR FAIA

SOMETIMES in its concrete application a trite statement may take on a new and interesting aspect.

Easily accepted, doubtless, is the truth of the general assertion that the difficulty of a problem in architectural design bears no particular relation to the cost of execution—that its true importance as a work of art cannot be measured in dollars. But opinions differ widely when the difficulty of designing a house is compared with the difficulty of designing a small library, an hotel or a loft building.

In *house* planning, the average layman, or lay-*woman* would often be inclined to dispense with the services of an architect were it not for the difficulty of planning the *stairs*—one of our few trade secrets.

Yes, designing an ordinary, commonplace, uninteresting little box of a house *is* about the easiest thing that architects sometimes permit themselves to do and that "artchitecks" *invariably* do.

But isn't it really one of our most difficult problems in design to create on paper a fifteen-thousand. dollar house to fit a ten-thousand dollar appropriation, and then make the owner happy and comfortable within walls and roofs which one would pause to contemplate with pleasure twice or thrice, however commonplace and inadequate their setting—to make the little thing really charming and "homey" in a fresh, individual way? Of course, it is. If you don't think so, you haven't tried it.

Occasionally you have a happy inspiration and a good client, and you strike twelve. Oftener you strike eleven, and generally you strike about eight and one-half or nine.

In a materialistic age, when a man's success in any field of endeavor that deals with materials is commonly gauged in the public mind by the bulk of his "output," rather than by its quality, by ability to get big or many things done rather than by the doing of them superlatively well, the skillful architect of houses is comparatively unknown outside his profession.

We architects too, admire and often envy the able salesmanship which sometimes rises to the height of generalship, but we are also ready to pat upon the back in a friendly and sympathetic way, and without the least bit of professional jealousy or envy the un-commercial fellow whose little houses are really works of art.

The "successful" architect may say: "I care not who designs the *homes* of the people, if I may only design their churches and court houses and marts of trade."

For sky-piercing walls, huge monolithic shafts of marble or granite—these are always "architecture" to the average man in the street who stands open-mouthed with up-straining eye before their brute bulk and majesty.

It is the big—the costly thing that is impressive.

Yet, on the other hand—we who would like to see a constantly rising standard of architectural taste, and a constant widening of public appreciation of good architecture, may well say: "We care not who designs our churches, court-houses and marts of trade, if we may really *design* the homes of the people."

An ugly, commonplace house, incongruously, or over-furnished, lacking good color within and pessimistically gray

without, is often the daily environmental influence in the life of the well-meaning but hopelessly "practical" building committeeman, familiar to every architect commissioned to do work of a public character. Without any enthusiasm for, or intelligent appreciation, of the fine-arts, he is a trying member (and seldom a lonely member) on a church committee, a school board, or a state-house commission.

His home back-ground isn't beautiful —so what can you expect?

Imagine a people *all* having at least *some* beauty in their habitations—however humble.

Verily, some of our self-styled church and school house "specialists" would be without a possible clientéle.

A million attractive houses would mean a much higher level of public taste than all well designed public buildings between the coasts.

If we are to grow a great architecture, we must plant the seed broadcast in city and country—root it in the soil, and let it grow upward to finally blossom at the top.

A great art must spring from the multitude; it must come from every man's intimacy with, and care for, beauty in his every-day environment.

But this begins to read like a sermon, instead of "Little Journeys to the Homes of House Builders," as it really should.

Talk has never pushed art very far. Most of us are Missourians and easiest converted by *works*. We must be *"shown."* Not shown too suddenly, but with that due and wise respect which practical men always grant to rooted customs and fashions, and to the sound ideas of other practical men.

But talk helps, of course, whether written or spoken, although the illustrations in an architectural magazine do more good and sometimes more harm than the text which attends them.

In discussing the house building problem, let us begin at the real beginning.

Using the word "home" in its physical sense and in the favorite phrasing of the real estate dealer, the building of your own *home* begins with the purchase of a piece of ground.

It is a vitally important step in the undertaking. This statement may seem obvious, but if its truth were more widely realized, a lot of land speculators would be bankrupted by the tax collector before their bare prairie "heights" and scrub-oak "forests" could possibly be unloaded.

Those who plan to build in small cities or in the suburbs are too often satisfied with two small a lot, making it impossible to create a proper setting for the house, or to provide sufficient open spaces between houses, which are essential to real privacy.

For various reasons, a man will often pay much more per front foot for a cramped lot without any natural beauty than he is willing to invest in a much larger one, which would afford an adequate and attractive setting for his house. Among these reasons may be mentioned the desire to be in a particularly fashionable neighborhood, to be close to some line of transportation, or to be within easy walking distance of a good school if he has small children. And many buyers of building lots hesitate to build in a new and largely unimproved neighborhood for fear that the character of its future development will be unsatisfactory.

A large proportion of our people have strong nomadic tendencies. They are not firmly rooted to any one locality. A salaried man seldom feels that his "job" is a permanent asset. Therefore, many who can only afford to build modestly, but who have become dissatisfied with renting, naturally build their own homes in a somewhat commercial spirit, with a view to a comparatively easy and profitable sale at some future, and perhaps not distant day, when a change of residence shall become necessary or desirable.

Another cause for the building of good houses on small and inadequate sites is the unfortunate manner in which most of our cities, towns and suburbs are laid out.

The fifty-foot lot, which is perhaps one of our commonest units of block subdivision, is too narrow, and there are many neighborhoods in which the unit is 40, or even but 30 feet in frontage

width, and where all buildings are detached, single residences. On these small lots, houses cannot be set as they should be, broadside to the street and to the garden, but must be packed in parallel rows, more or less like sardines in a box. On these narrow lots, which are often deeper than necessary, there is little extra space left between them for lawn, trees or shrubbery. The kitchens, pantries and servants' porches occupy all or most of the rear end of each, and instead of being a *garden,* perhaps more than half of the property to the rear is the typical American "back yard," while the preponderance of outlook from the principal rooms on both floors is directly into the windows next door, often at such close range that the childless Smiths are kept awake until the small hours in the morning by the crying of the Jones' twins next door.

The craze for bungalows, at first confined to the Pacific Coast, has spread over the entire country, but few people seem to realize that a bungalow requires a wide lot, not less than 75 feet, and preferably 100 or more.

As to choosing between a corner and an inside piece of property, much depends upon the size of the place, and the character of the neighboring improvements. A narrow corner piece lends itself to more convenient planning and affords a more open and sunny principal exposure than a small interior lot, but requires a larger outlay for maintenance, and it is difficult to give sufficient privacy to the grounds. These objections do not apply so much to a large lot, and such a location naturally appeals to the man who wants a somewhat conspicuous and showy place.

Perhaps the commonest fallacy governing the choice of location is the belief that a *south* or *east* frontage is preferable to a street outlook to the *north* or *west.* This is due largely to our mistaken "front" and "back" yard arrangement of small places.

Buy a lot wide enough to accommodate comfortably a house set parallel with the street, and have instead of a "back-yard" or a vegetable garden, a *real garden,* the privacy of which you can thoroughly enjoy. It is only on lots of great depth that real gardens can be placed between the house and the street, and unless the property is very wide, these are marred to a certain extent by the approach to the principal entrance.

It is well to hesitate before buying in a block where a building line has been established too far back from the street. The writer has in mind quite a large district near the outskirts of one of our large and rapidly growing inland cities, where this mistaken imposition of deep front yards upon future purchasers has made all the property much less desirable than it would have been otherwise. Although the lots all have a frontage of 100 feet or more and a depth of over 300 feet, each new house must be set so far back that it is practically in the middle of the property, and the grounds in the front or in the rear are not sufficiently spacious for a really good garden —always remembering that we are talking about a garden made to delight the eye and not a utilitarian garden cultivated for the benefit of the inner man.

Speculative subdividers of new residence districts not only handicap every prospective purchaser through the fixing of unsatisfactory units, both as to depth and width, but through the almost unvarying adoption of the checker-board street plan, they ruin the natural beauty of tracks which are of decidedly uneven contour. For the sake of adhering to the straight line, hills and knolls are cut through and hollows are filled. As a result, most houses must be perched above the street in an awkward and unhomelike position and approached by terrace steps. The ground surrounding others must be partially filled at considerable extra expense—while the natural beauty of the neighborhood (which would have been wonderfully enhanced by a careful working out of a scheme of curved thoroughfares) is seriously marred or entirely destroyed.

It is hardly necessary, perhaps, to set forth the desirability of selecting a place adorned with fine native trees. The big spreading oak or elm, which stands in pleasant relation to the future building, may be worth a thousand dollars to a

man who wants a beautiful *place* as well as a beautiful *house*.

The residents of our smaller cities are just beginning to appreciate the advantages of building in the outskirts or in the nearby country. Hitherto, the tendency has been to huddle together in a small town, where, notwithstanding relatively low land values, some of the most pretentious houses are built upon grounds of cramped and inadequate dimensions.

If you are a buyer, in going out where you can have plenty of room, you need not fear being lonesome for long. As a people, we are just beginning to appreciate the sort of country life that has so long been dear to the Englishman. This is largely due to the development of interurban transportation and the perfection of the automobile. Therefore, go out, where your means, although modest, will enable you to buy a generous piece of ground. If you can afford to buy a good bit more than you ultimately expect to use, the future rise in land values may in a few years almost pay for your own place, particularly if your house and grounds are made beautiful.

There are many cities in which, until recently, the citizens were afraid to go beyond the outskirts, and where the fashionable residence neighborhoods were close to the smoke and noise of the business and manufacturing districts. After a certain number of the wiser and more independent ones had built attractive outside places regardless of the current fashion, they soon found themselves in the midst of a scene of unprecedented building activity, for the majority are like sheep and are easily stampeded to a new and undeveloped neighborhood, if a few of the "right people" have courage enough to lead the way.

If you can get several congenial friends to join you in buying and improving a tract of land sufficiently large to enable you to avoid or mitigate the bad results of the ignorance or shortsightedness of the real estate sub-divider above pointed out and to arrange your several houses and grounds in pleasing relation one to the other, by all means do so. It is seldom, however, that this is feasible. A few real estate syndicates or development companies under exceptionally intelligent management have done and are doing this very thing on a larger and therefore more successful scale, chiefly for the benefit of the wealthier section of the middle class. It is to be hoped that many similar schemes of intelligent development will be applied to suburban properties, which are within the means of the average man.

The recently developed but rapidly growing interest in American city and town planning is a hopeful sign that this will be done.

After you have bought your ground, several years may elapse before you feel able to build the sort of house that you must have. Therefore, improve the time of waiting by planting trees and shrubbery where they will be needed, in relation to the future building. You may plant as heavily as you choose along and near the boundaries. Remember, also, that the best protection for the west exposure of a porch is the shade of a large tree standing at a sufficient distance to intercept the rays of the summer sun in late afternoon. Also remember that your flower garden as viewed from the *house* will be most effective, if it is seen in full sunlight rather than between you and the sun, and that the late afternoon is the time of leisure for porch life and the enjoyment of the home grounds.

If your place is large enough for a small fruit and vegetable garden, plant your fruit trees at once, even though it may be necessary to move some of them later. In short, make your place a little nursery and save years of waiting for the growth of trees and shrubs after you have built.

As soon as it becomes known that you intend to build a house that is anything more than a mere shack, you are liable to be pestered by architects looking for a "job." Your friends will also take a hand in helping you to decide as to the gentleman who is to be favored with your commission. While there are exceptions which prove the rule, you may be pretty certain that the type of architect who openly solicits your work, has a *business*, rather than an *artistic* tem-

perament, and, if you wish a beautiful little house, you must look for the latter, although, of course, there is such a thing as too much *"temperament"* and not enough *business* in the offices of some architects.

Good house building is a very practical, as well as æsthetic undertaking, and in choosing an artist to design your house, you should know that he has a good technical knowledge of building, and is a good practical handler of construction, or, if he is not, that his *partner* is.

One of our most famous American architects had two partners of world-wide reputation as designers. On being asked one day by a client as to *his* particular function in the business of the firm, this quiet, unassuming gentleman replied, "To keep the other two from making blank fools of themselves."

About twenty years ago a well-known Boston architect said to me: "The American people are just beginning to use architects." And his statement was true.

At the present time a very small percentage indeed of our homes, including farm houses and tenements, are designed by architects, but the proportion is steadily increasing.

To a man who has but a few thousand dollars to put into a cottage or bungalow, the usual fees which a well-qualified architect must demand for that class of work seem almost prohibitory. Yet the cost of maintaining a down-town office in a large city is so high that only a young architect can afford to do much work of this class. You cannot get the direct personal touch of a first-class experienced architect, whose work embodies taste and individuality, and who will carefully provide for every detail of your practical requirements, unless you are willing to pay him a fee of eight or ten per cent. of the cost of your building. There are, however, so many people of modest means, who want something better than the house usually designed by the average architect-builder, and the tendency among young architects of talent and good training to locate in the big cities to the neglect of smaller towns is so strong that a great demand has arisen for inexpensive "stock" working plans for small houses. And wherever you find a demand that can be met with a profit, you will soon find the field being worked for all there is in it. For not only in the magazines devoted to the art of the house and garden, but in many popular journals as well, you will find the advertisements of at least a dozen "plan factories."



A SPREADING OAK OR ELM IN HAPPY RELATION TO THE HOUSE, MAY BE WORTH A THOUSAND DOLLARS.

We architects who are debarred by

professional custom, as well as by the rules of the American Institute, from advertising our wares in cold type, have no quarrel with those who *do* thus advertise, in order to distribute widely for frequent duplication their stock plans of small houses. We *all* advertise as much as we can, and in this advertising age a professional man who advertises in print, while he may be under suspicion, is not necessarily a "quack" or a "shyster." Every professional man advertises or sees that he is advertised in *some* way. Our real quarrel is with the average quality of design embodied in the stock plans from most of these factories and with the grossly misleading under-estimates of building cost which they publish.

If you wish to build a very small house and wish to build it with cheapness in price as the main desideratum, a country builder working from his own plans can give you more as to *quantity* than you would get from the plans of a good architect.

There is a mistaken idea abroad, which frequently appears in print, that it costs no more to build an attractive house than an ugly one. The truth is that the country contractor of the humbler type, accustomed to small work, is likely to charge a very stiff premium for being at the pains and uncertainty of working from a set of city architect's drawings. He is *afraid* of them—also of the long and explicit specifications by which they are usually accompanied. He prefers to build in his own way, and there are many honest fellows in communities where architects are seldom employed, who give their customers good value as to workmanship and materials. But of course, their plans are stereotyped, and their exteriors commonplace, or worse.

For a small house, costing over $5,000, the writer does not believe that the employment of a capable and conscientious architect is an extravagance. He will not only understand your requirements, and thoroughly satisfy them as far as your means will go, but his drawings and specifications being complete and explicit and supplemented by his expert oversight of their execution, will not only insure your getting what you pay for, but will largely forestall the annoying and sometimes appalling total of extras, which confronts the man who sets out to spend a certain limited sum, and finds when he is through that he has really been very extravagant.

If beauty of design is one of your chief considerations in building, choose your architect because his executed work appeals to you. If you are fond of the picturesque, go to an architect of the picturesque; if you are fond of the formal and traditional, go to an architect of formal, "correct" houses. Unless you *like* his work, do not patronize an architect, simply because he is an acquaintance or a friend.

If you reside either in a great metropolis or in a small town, your opportunities for direct familarity with the residence work of the different architects may be limited.

The best way to become familiar with the work of many architects is to begin, long before you build, to subscribe to the journals, particularly those published for the profession and which illustrate the work of the best men.

Most architects who specialize, in residence work (and this class of building is rapidly becoming a specialty) will be pleased to show you in their offices photographs of what they have done and sketches of what they would have liked to do, without placing you under any definite obligation. As compared with lawyers and doctors, architects, as a rule, are "easy marks." There is not one in a dozen who has the hardihood to look at his watch the moment you begin to ask him questions as to the sort of house he would suggest for your property; as to what he thinks it is likely to cost, and a lot of other questions, calling for valuable professional advice, which are asked by many visitors to architects' offices, who are merely "shopping" around. If you are talking to a man of demonstrated ability in this difficult field, do not expect him to be willing to submit preliminary sketches, gratis, on approval. You cannot get good service in that way. Although it is true, that many architects are so keen for new work that they, like



A HOUSE EFFECTIVELY SET FAR BACK FROM THE ROAD OVERLOOKING LAKE MICHIGAN. A PROPER EXCEPTION TO THE USUAL RULE OF PLACING THE HOUSE NEAR THE HIGHWAY WITH THE GARDEN ON OPPOSITE SIDE.

fashionable interior decorators, make many sketches gratis in order to secure a few lucrative commissions from people who have to pay in *some* way for that which the other fellows have obtained for *nothing*.

Professional ethics as we flatter ourselves they *are*, and business ethics as they *should* be, are both very much alike.

EDITOR'S NOTE.—The second and succeeding articles will cover as comprehensively as possible the entire field of residence planning, design and decoration.



THE PLACE SHOWN IN THE PRECEEDING ILLUSTRATION COMMANDS THIS BEAUTIFUL VIEW OF LAWN TREES AND WATER.

THRIFTY DRAVCHTSMANSHIP

THE ECONOMICS POSSIBLE IN THE WORK

BY J. T. TVBBY, JR.

MUCH HAS BEEN WRITTEN in current journals about the business management of offices, and about the real or supposed interests of office affairs, but so far little or nothing has been published concerning economies possible in the work, which represents seventy-five per cent of the office cost. I mean the cost of draughting.

In a recent lecture, Mr. Hastings attributed a large part of his success to the continuous practice of working several hours each day with *T* square and triangle. He insisted that not too much be done freehand, but that the hand and brain be given as constant mechanical training as a skilled pianist gives to his practise. Constant daily application is an essential, and the economic value of this habit can hardly be over-estimated.

In Guadet's "Theory of Architecture," the author devotes several paragraphs to the proper adjustment of the drawing board to the height of the stool, and wisely advises the parent to consult a doctor in the arrangement of the position that the student shall assume. Most experienced draughtsmen, fortunately or unfortunately, have passed this stage for all time, and such habits of posture as have been acquired probably never can be changed completely. For the staff of the busy man, however, it may be useful to know what methods have been discarded after ten years of practice, and very many costly experiments.

Several years ago, I made an exhaustive study of the vertical drawing board. My work consisted of design with some freehand drawing. It seemed reasonable to suppose that if the board could be set so that the average lines of sight would be normal to the paper a much more accurate estimate could be obtained of one's work. There was another distinct advantage,—the vertical surface reflected much less light and apparently saved a great deal of eye strain. In Germany, much of the work is done with the board in this position, and several draughtsmen in this country have given me the result of their experience with the vertical board. I suspect that they were trained to its use early in their office practise. Certainly, if one's work is in pencil and one's eyes are not overstrong, this is an extremely good way to begin; no artist would think of painting in oil on a horizontal canvas; but for the man who does pen and ink work one day, perspective the next, and pencil the next, a slightly inclined board is a necessity for the very simple reasons that ink must flow down from the pen, and perspective points cannot be managed in mid-air.

For the man who only draws in pencil, there is still objection to the vertical board, if he has not been trained to it before he reaches the age of twenty-five. It is awkward to handle drawing tools readily and the arms get very tired. A convenient shelf or easel, on which occasionally to stand the drawing in a vertical position, gives an accurate idea of the work.

After considerable experimenting, I have concluded that it does pay to pitch the board as much as possible, that is, to a point where the *T* square, the triangle, the scale, and the tools just will

not slide. Of course, their angle of friction varies to a slight extent with the character of the paper, and the finish of the tools, but it is safe to work at a pitch of two and one-half inches to one foot. At three inches to the foot the *T* square slides. Even so slight a pitch aids one in a correct estimate of the drawing and certainly is better than a level board.

Having placed the board in the best position as to height and inclination, it is necessary to make provision to cut off all light directly reflected from the paper to the eyes. It is extremely trying to look at a bright spot continuously. If the paper is so fixed that the light from a distant window slants across it, under the pressure of continuous work, one will feel the strain. A screen of some kind, or better, a wall or a partition at the back of the board, is the ideal arrangement. Hence the value of the alcove system in draughting rooms, as well as in libraries. The worst possible scheme is to place the table between the draughtsman and the window. Any dull broken color is restful, as a background.

The matter of a proper *T* square is a serious problem. One with a movable head can be quickly adjusted, and is well worth the extra cost. Actually, it takes the same amount of time to set the paper about at right angles to the edge of the board, and make the *T* square fit the lines with a touch, than to set one tack, move the paper to fit the *T* square and then set all the corners. How often a single or even two drawings are taken up and reset or boards are shifted because Mr. Smith's *T* square will not fit Mr. Jones' drawing.

The ordinary glued up board shrinks and warps and moves with each change in the humidity, and is specially unreliable when the steam is turned on in the fall. Several years ago I tried a number of office *T* squares on boards, commonly accepted as true, and found none of the edges of the board straight for the full length. With hardwood strips on the edge, the error can be halved. I doubt if it can be entirely eliminated.

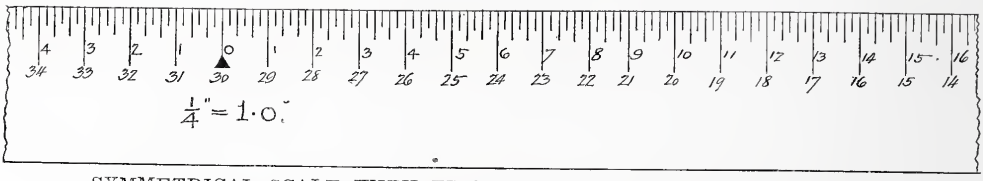
The parallel motion devices with gut or wire on pulleys on the back of the board are considerably more accurate than *T* square, on common boards with soft pine edges. An error of one sixteenth of an inch in two feet is common. But much the best plan is to screw a planished steel straight edge to the edge of the board.

This absolutely true and steadily reliable. With this edge a *T* square with a loose head is quickly detected. This straight edge is a commercial article, and is made of an inverted *T* section. Its upper edge can be set one-thirty-second of an inch below the surface of the board to reduce the wear on the blade of the *T* square.

The only objection is that the steel will wear the wood of the *T* square, and the head will need planing occasionally. In pushing the *T* square up over the paper there is a tendency to let it run on the lower or nearer edge of the blade. Consequently, the wear on the head of the *T* square will be on the bevel, and a rocker head will result.

Much time can be saved by the use of standard sheets. Certainly the truss details, framing sections, general layouts, and working drawings of the engineer's office, are no more difficult to arrange on a given sheet than are the designs for a building. Yet it seems well understood that engineers use this short cut method much more than architects. It is a simple matter to have stock sheets printed with a border, titles, scale, etc. Easy filing in shallow drawers is a possibility. No time is wasted on drawing borders and cut-offs. The sheets can be printed with a dot for the center each way. In spite of the first impression to the contrary, work on a standard sheet generally proves the less wasteful method. The draughtsman plans his work more intelligently.

In most workshops, men are trained to return each tool after use to its place, and accustom themselves to pick it up again with practically no conscious effort. Cannot the same method be reasonably applied to draughting? If one knows instinctively where to feel for bow spring compasses or ruling pen, does not the work of doing the essential conscious things become easier? No rack or ar-



SYMMETRICAL SCALE WITH TWO DIVISIONS FOR ITS FULL LENGTH.

rangement of tools can be devised to satisfy even a small portion of individual requirements, and nothing short of many experiments will settle this question for the worker.

The rack on a revolving bracket, like a dentist's cabinet is in the way, prevents the free use of the triangle, is never where you expect it to be, and is an unmitigated nuisance. But tools distributed over the paper are worse. A shelf directly in front of the draughtsman makes too long a stretch. If one can use a board not over 36 inches wide, a series of very shallow spaces on the board or a shallow drawer approximately to fit the instruments with the heads inclined toward the workman works moderately well,—far better, in fact, than any of the other methods. Many draughtsmen use a flat cigar box. But this is by no means ideal, for the reason that the instruments are mixed up in the box in such a way that it requires attention to find the right one. Of course, the level of the tops of the instruments must be well below the top of the board, so that if the *T* square extends beyond the right hand edge of the board, no instrument will interfere with it. The simplest and easiest way, apparently, is to lay out the instruments on a big inclined drawing table—the most useful instrument nearest. With thin cleats, the drawing tools can be kept in place and prevented from rolling. On this table is set the board with the drawing. Its cleats raise it sufficiently to clear the instruments. The tools which stay on the drawing can be reduced to a small triangle, a scale, and a *T* square. With these only, nothing is likely to get lost. Then there is room at the top of the board to spread out drawing used for reference. All other tools such as roof pitch triangle, red, blue and yellow pencils, sharpened pencils, ink, dust brush, scales, slide rule, French curves, etc., can be on a rack or brackets, well out of the way, but preferably within reach without getting off the stool. On a round-headed screw on the edge of the table can be hung a twenty inch 30 degrees and 60 degrees triangle for long axis, or for borders, if they are not printed. This triangle is a most useful tool and has often proved a great time saver.

A set of roof pitch triangles are invaluable. They are made of celluloid 6 inches on the base, the other dimension varying from 2½ inches to 8 inches, 2½ x6 inches is 5 inches pitch. 5½x6 inches is 11 inches pitch. It is rare that refinement is carried to a point where if any eight inch pitch angle is too low, a nine inch would be too high. On a piece of work some time ago, it was very disagreeable to find the foreman carpenter struggling with an 8¾-inch pitch on the bevel cut for a hip rafter when a 9-inch would have simplified the office and field work. Besides, draughtsmen waste much time in laying out the symmetrical angle after one side of a roof is determined. A set of twelve six inch roof pitch triangles in celluloid cost less than five dollars. One can hardly exaggerate their convenience.

Pencil sharpeners of the very best make are useful. The drawings are vastly less soiled from dirty fingers. From this fact alone the machines are an investment. But a perfect point and practically no broken points, and the use of cheaper pencils are added advantages. The office boy can readily do all the work.

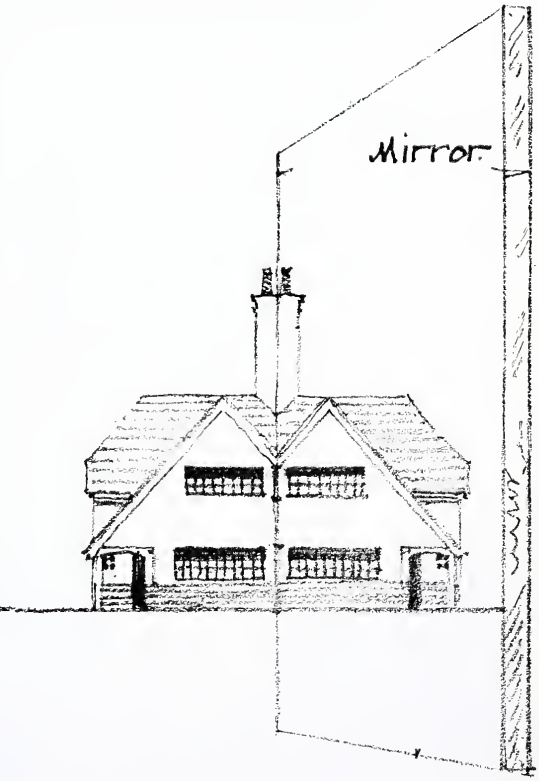
The usual ¼-inch scale divided in feet and half feet with inch divisions for ¼-inch at the end are very inconvenient. For men working mainly on symmetrical buildings the writer has designed a scale and it is now made commercially with the "O" in the center. With this,

symmetrical dimensions can be laid off with one operation. The draughtsman avoids shifting the scale each time a distance from axis is to be measured; consequently, saving time and making the work much more accurate. The whole length of the ¼-inch scale should be divided in two inch divisions, in place of 6 inches. The foot should be divided in three main divisions of four inches each in place of two. Four inch parts are perfect for brick sizes, and are much more useful than six inch divisions. A glance at the cut will indicate clearly the arrangement. Any required division of the two inch unit can be gauged accurately by the eye. Symmetrical work occurs everywhere. With this scale it is a simple matter to find "centers" without the use of arithmetic, and the consequent chance of error.

With the scale of three-quarters of an inch to the foot on the reverse side, it is easy to make the change from one quarter inch scale working drawings, to three quarter inch scale details. The three quarter inch scale can be used equally well as a sixteenth inch scale, considering each division as twelve feet. A single scale with a single bevel on each side is far better than one with four bevels, and eight scales. Sixteen inches is about the right length for the scale. Eighteen is not inconvenient. In any case reject scales divided into feet and half feet and use one divided for the full length with two inches and four inch spaces in each foot. So little change is made from the ordinary scale that no time is wasted in making the change.

Parallel pencils are fairly useful if one will go to the labor of diligent practice to learn to keep the line between the points exactly normal to the edge of the board. For brickjoints, tile courses, quoins, and the like, they work moderately well. But it is difficult to hold them just right from one end of the *T* square, to the other. Parallel pens, however, are much easier to use and save a good deal of time, besides giving better work. For blacking in small plans they give splendid results for the reason that they carry a quantity of ink with little danger of blotting. For line work, they perform the same service as parallel pencils. The flat surface of the outside of the pen makes them more reliable than the pencils.

It is very useful to have three or four reliable bow-spring compasses, permanently set, and marked for 4-inch soil pipes, electric outlets, columns, round flue linings, and whatever stock sizes are drawn repeatedly. Greater accuracy and speed are the sure results.



METHOD OF SHOWING SYMMETRICAL HALF OF A DRAWING BY MEANS OF A MIRROR.

Years ago the writer laid out on cardboard a series of stair treads and risers on the rule of twice the height of the riser, in inches, plus the width of the tread in inches equals twenty-four. This too has proved useful, and greatly reduces chances of error, in calculation, for each new stairway.

An ingenious device for rapidly laying off equal spaces for dentils, balusters or shingle courses is a wall paper hanger's wheel marker. See cut. The points

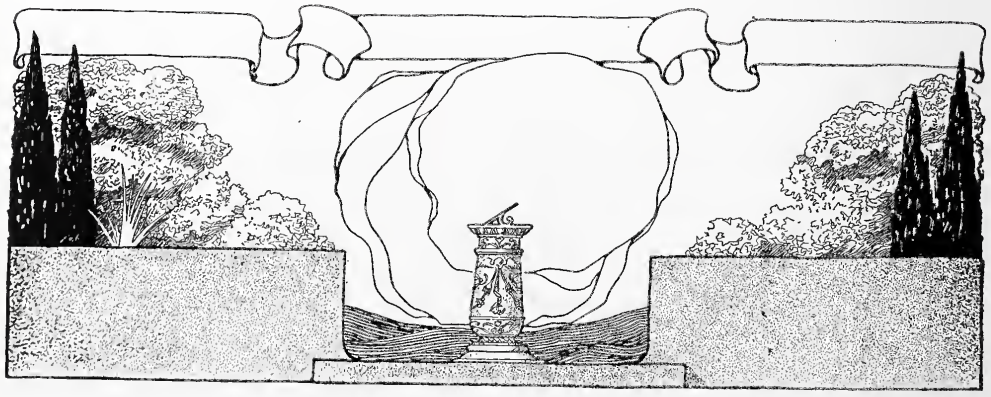
are spaced with sufficient accuracy for a one-quarter scale drawing. This tool can be bought at any hardware store for less than twenty-five cents.

In offices where work is secured through competition, I have noticed the clever trick of drawing only half an elevation or section for a study. The symmetrical half is shown by holding a piece of mirror normal to the surface of the drawing with its edge on the axial line, as shown by the cut.

For the first layout of working drawings, paper of the best quality,—brown or white is a good investment. Many drawings are discarded because they become worn out, soiled or smudged from rubbing. A paper of the best quality, costing very little more, would stand the wear and save the draughtsman's time. Heavy paper of the best quality can be filed horizontally or vertically. Many working drawings are now made in pencil on tracing paper of good quality. In some offices a cheap quality of cloth is used and the drawings are made in pencil on the dull side. Tracing paper makes a clearer print, although it is far less durable to handle for the working set.

There is practically no difference between the worst and best qualities of paper in the amount of buckling under changes in humidity. A stretched sheet is reliable for the drawing that must remain on the board for several weeks. If a drawing is of small size a mounted sheet is even better than a stretched sheet, and will stand much more abuse in handling and filing.

To call attention once more then to the preeminently useful, although unusual tools, I would speak of the ¼-inch scale with 2-inch divisions for its whole length symmetrically arranged, to the 20-inch triangle for long vertical lines, and to the set of roof pitch angles. None of these are revolutionary. All are very well worth their initial cost, and will lighten the draughtsman's arduous work.



AN ARTISTIC ENTENTE-CORDIALE

THE MVSEVM OF FRENCH ART, FRENCH INSTITVTE IN THE VNITED STATES

BY W. FRANCKLYN PARIS

An experiment in Art propaganda which will be watched with a great deal of interest has been started in New York by the French Government, acting through the intermediary of private individuals of high social and official position, both here and in France.

Acting under a charter obtained last December in Albany, an association of American art lovers calling itself the "Museum of French Art, French Institute in the United States," has just held an exhibition of prints, etchings, and engravings which foreshadows great things for France along the line of her intellectual expansion.

The fact that the majority of the prints exhibited were loaned to the American Society by the French Government and withdrawn from the collection in the Historical Museum of the City of Paris, especially to be shown here, gives an idea of the arrangement under which the Museum of French Art in New York and its French sponsors in Paris propose to conduct their campaign of art education. The charter of the American Association states that it was organized "for the general educational purpose of extending and popularizing among the residents of the United States, knowledge of the arts of France and its diverse manifestations, its technique, its history, and the social conditions which explain its manifestations, with power to establish and maintain a library and central museum of French art and to issue publications, make expositions, and otherwise further the general purposes of the corporation."

A private organization starting out to "establish and maintain a library and central museum of French art" in New York would find itself confronted with a very serious problem. Either it would resolve itself into a second art shelf of the New York Public Library, with the same reference books and documents, or else find itself a local and incomplete repository of French art works owned here privately and loaned at spasmodic intervals by New York collectioners at their whim and convenience.

What saves the "Museum of French Art, French Institute in the U. S." from this fate, is the tacit understanding it has with the French Government, that its library and museum in New York shall be fed, from time to time, from such art warehouses as the Louvre, Luxembourg, Versailles, and Fontainebleau museums.

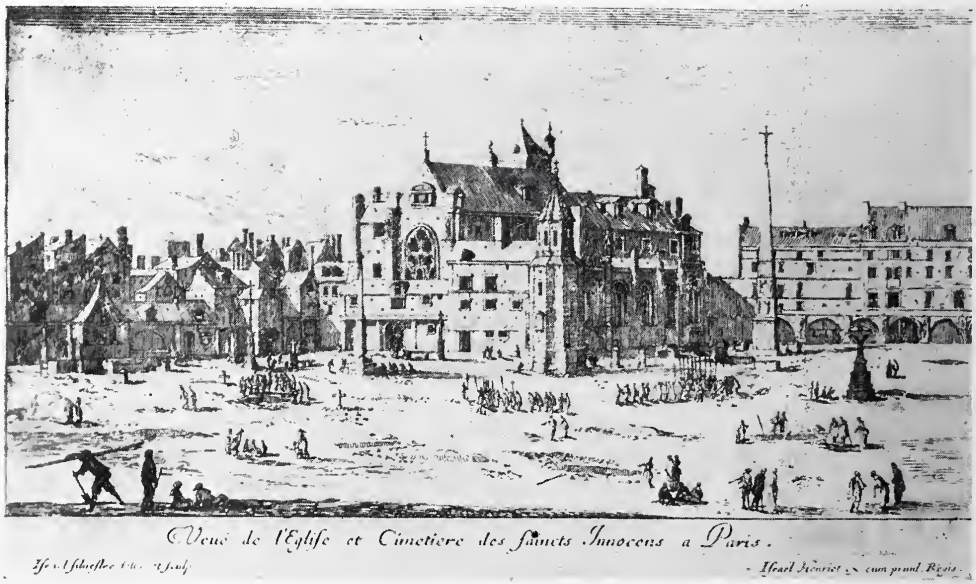
There is no formal stipulation that the National Museums of France are to be periodically stripped of their treasures in order that the Museum of French Art in New York be in a position to properly impress its visitors. It is not readily conceivable, for instance that the curator of the Louvre would ever consent to having the Venus de Milo, or the Winged Victory of Samothrace removed to New York for the edification of sedentary Americans. The precedent established in the recent exhibition of prints, however, and the patronage of the idea in France by such personages as the Prime Minister, the Minister of Fine Arts, the Minister of Foreign Affairs, the Under Secretary of State, the President of the Beaux Arts, the President of the Society of French Artists, and the Directors of the Louvre, Luxembourg, Versailles, and Arts Decoratifs Museums, permit the as-

sumption that every reasonable assistance will be given to the project by the French Government.

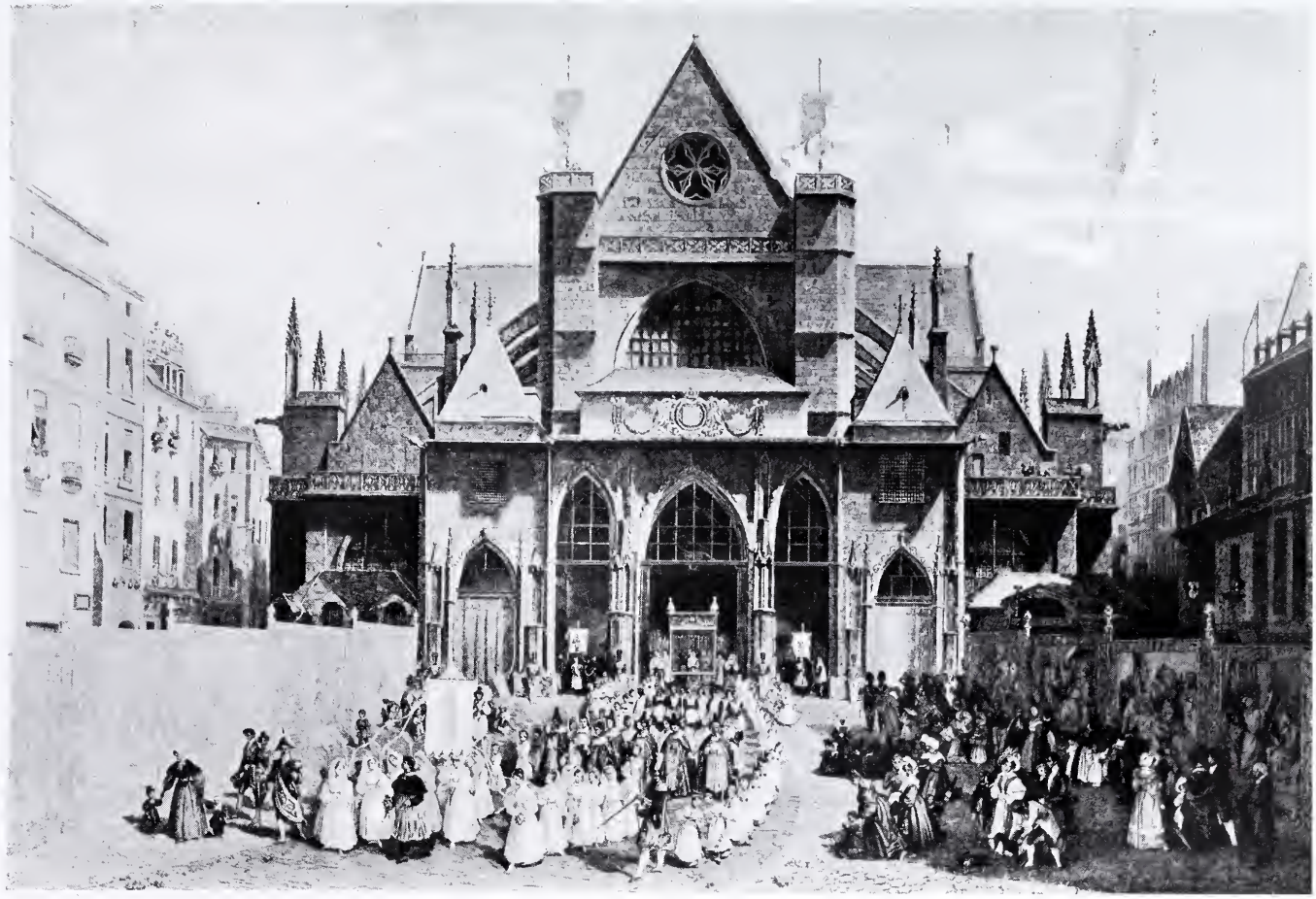
While we may not see the Rembrandts, Rubens and Murillos of the Louvre hung on the walls of the Museum of French Art here, we may, on the other hand, reasonably expect tapestries from the Gobelins, porcelains from Sevres, Napoleonic relics from the Invalides, casts from the Louvre and possibly historic furniture from Cluny or Versailles.

What makes the undertaking particularly praiseworthy is that absolutely no taint of commercialism attaches to it. The project is of the highest altruism on the part of France and in keeping with her policy of spreading her prestige through art and letters, rather than through commerce. While England and Germany have been covering the world with a network of trade agencies and sending broadcast an army of commercial travellers, France has been centering her efforts upon spreading the knowledge of her literature and language. The adding of art to the National curriculum is new and the experiment with the Museum of French Art in New York is the first of its kind, but as long ago as 1900 France had embarked on the systematic expansion of the French language throughout the world.

Upon the initiative of a central committee in Paris, there has been organized a federation of literary clubs from Indo-China to Peru, and from St. Petersburg to Chicago, all affiliated to what is now the Alliance Francaise. Under the auspices of the Alliance, distinguished men of letters are sent every year on distant lecture tours to keep alive the interest in French letters and the French language in the hearts of Hindoos, Malays, Brazilians, Turks and Americans. In the United States alone, the Alliance counts some sixty branches, some of them numbering upwards of five hundred members. It was as the fruit of a visit to these branches two years ago of Mr. Marcel Poete, Inspector of Historical Works of Paris and Curator of the Paris Historical Society's library, that the Museum of French Art in New York was organized. Mr. Poete in his capacity of official lecturer of the Alliance, came into very close personal relations with the leaders of the Alliance movement in this country, Messrs. McDougall Hawkes in New York and J. Leroy White in Baltimore, and with them conceived the idea of extending the work of propaganda of the Alli-



CHURCH AND CEMETERY OF THE INNOCENTS.



RELIGIOUS PROCESSION
FROM AN OLD CHURCH.

ance so as to include in its field French art in all its many and varied manifestations. Messrs. Hawkes and White going to Paris took up the matter with such men as Rodin, the Sculptor; Raymond Poincare, the present French Premiere; Gabriel Hanoteaux, former Minister of Foreign Affairs and a member of the French Academy; and with the Director of the Beaux Arts and National Museums, and at a meeting held at the Ministry of Fine Arts the project for the Museum of French Art in New York was formerly launched.

The Museum more than justifies its existence by the widespread sympathy with



RUE ST. ANTOINE AND THE BASTILLE.

France and French ideals prevalent in this country since the days of La Salle, Champlain, and the early French explorers. The map of the United States still bears witness to the fact that the valley of the Mississippi, and all eastern Canada, was once French country, administered under the laws of France and flourishing under the fleur-de-lys or the tricolor. St. Louis was named after the French King, New Orleans after the old capital of Joan of Arc, and Fond-du-lac, Sault-Ste-Marie, and Baton-Rouge, keep green the memory of the French coureurs des bois of the XVIIth and XVIIIth centuries. At the critical period in our history the French again command our sympathy and gratitude. The battlefields of the Revolutionary War are harrowed with the best blood of France spilled disinterestedly in defence of a cause espoused through chivalry and high ideals only. Lafayette and De Grasse and Major Armand, who at home was Marquis de la Rouerie and more royalist than the king, will live forever in the history of both France and the United States, and when Napoleon, facing definite exile, looked for a friendly shore upon which to end his days, it was in America he fixed his longing.

For more than a century there has been a current of French thought running through our social life. Our national capitol at Washington is the work of a French engineer and architect, and the symbol of liberty that lights the way into New York harbor is the gift of the French people. Today our greatest engineering accomplishment, the Panama Canal, is the fulfillment of a French ideal, and French is the language of our diplomacy.

Under the auspices of the Alliance Francaise an exchange of professors has been begun between the Sorbonne in Paris and Harvard and Columbia on this side. Independently of this movement of intellectual "rapprochement," American students of architecture for more

than a generation have followed the courses of the Beaux Arts, and some of our best architects of today make grateful acknowledgment to France for the knowledge absorbed by them there.

What more natural, therefore, that when the leaders of the Alliance Francaise movement broached the subject of extending the work of the Alliance so as to include art, the responses should have come first from American architects imbued with ideas taught in the great French architectural school.

Already, although the French Institute and Museum is but a few months old, it numbers among its adult supporters, some of the best known among them, Thomas Hastings, Whitney Warren, S. Breck Trowbridge, J. H. Freedlander, Lloyd Warren, Charles T. Mathews, etc.

In other fields of art, J. W. Alexander, Edward Tuck, Otto Kahn, Dr. George F. Kunz, Albert Herter, Thomas Hughes Kelly and W. B. Osgood Field have accepted to act as trustees or on committees. In France the patronage is even more brilliant. The honorary presidents include the Minister of Fine Arts and Public Instruction, the Minister of Foreign Affairs, the Under Secretary of State, the French and American Ambassadors, Rodin and Hanotaux.

Among the active officers are Raymond Poincare, the present French Premiere; Cormon, President of the Academy of Fine Arts; Marcel Poete, Librarian of the City of Paris; Laloux, President of the Society of French Artists, and the Directors of the Louvre, Luxembourg, Versailles and Arts Decoratifs museums. In addition, the list of sponsors contains the names of Paul Deschanel and Ernest Lavisse of the French Academy; Boutroux, Homolle, Leroy-Beaulieu, Liard, Criset, Diehl, Esmein, Jullian, Levasseur, Perrier, Reinach, of the Institut de France; Humbert, Neriot, Collin, St. Marceaux, Pascal, Mercie, Waltner, Vernon, of the Beaux Arts; Bourgeois, De Selves, Couyba, former Cabinet members; Hughes, La Roux, Gaston Deschamps, Adolphe Brisson, Funck-Brentano, and a score of lesser personalities in the world of art and letters.



THE TUILLERIES.

As will be seen, the element of officialdom as exemplified in the persons of Cabinet Ministers, academicians and museum directors guarantees the co-operation not only of the French artistic world, but of the Government as well.

The experiment will prove interesting from more than one point of view. An exhibition of Francois I or Henri II furniture, let us say, made up of objects

loaned by France, could be supplemented here by pieces of the same period now in the possession of American collectors. There is no doubt that men like J. Pierpont Morgan, W. A. Clarke, Benjamin Altman, Henry C. Frick, Andrew Carnegie, Harold McCormick, Rodman Wanamaker, T. E. H. Curtis, of Plainfield, and other wealthy patrons of the fine arts would gladly loan their treasures to round out such an exhibit. On the other hand, when the Louvre acquires a new collection like the Chauchard collection, for instance, concurrently with the placing on view of the units of this collection in Paris, the Museum here would display a full set of photographs and casts, thus presenting a graphic picture of the exhibit for the gratification of its afficionados in New York.

The prospect is a very alluring one and it is hoped that the open-handedness of American art lovers will make it realizable on a scale in keeping with the munificence of the French Government, which already has donated funds for the maintenance of the association in Paris.

No revenue accruing to the association here, either from its exhibitions or lectures, a graded membership has been designed from which a measure of income is to be derived. Upon payment of an endowment of $5,000 a member acquires the title of Benefactor. Members contributing $1,000 become Founders, and members contributing $100 acquire membership for life.

The initial effort of the Museum of French Art in New York shows that a high standard is to be followed.

The prints, which were personally collected for the exhibit by Mr. Poete, permitted an imaginary reconstruction of the French capital as it was, as far back as 1600. Since the earliest official plan of the city to be preserved bears the date 1550, it will be seen that the collection possesses, besides its artistic value an historical and documentary value far above anything placed upon exhibition here in many years.



HOTEL DE NEURES—OLD CITE.

The Paris revealed by the engravings, etchings and lithographs displayed was not the gorgeous and bespangled Ville Lumiere of the present day. The Paris of the Grands Boulevards and of the Place de l'Opera, of the Rue de la Paix and the Champs Elysees, of that entire festive region to which all good Americans are said to journey when they die, dates back to the time of Napoleon III of much maligned memory. Before him, the streets of Paris were as the tortuous and narrow alleys of ancient Boston, only more so. Visitors to the Paris Exposition of 1900 who remembered the staff and stucco and papier mache reconstruction of the Rue Saint-Antoine in

the "Vieux Paris"—a side-show attraction on the "Pike"—were given an opportunity to complete the picture by study of the views of these characteristic sections of Paris at three different epochs.

For purposes of easier identification, Mr. Poete grouped the prints portraying the aspects of the capital into three divisions—the left bank of the Seine, the right bank and the small island between, where the Paris of the twelfth century was confined. Thanks to this systematic arrangement, lovers of French literature and history were able to set down among their proper surroundings the more or less historical characters of Dumas and Balzac and picture the stage setting against which the heroes of the French Revolution and of the Napoleonic era disported themselves.

The pieces on exhibition number nearly 500, some of them, from an antiquarian point of view, priceless. Among the engravings were works by Marot, Aveline, Israel Silvestre (1658), Meryon, Chocarne, Thomas Girting, Rigaud, Perelle, Berthault, Nee, Mariette, Manesson-Malet, Chastillon, Probst, Variu, Ramsomette, Devilliers, Trimolet and Leguay.

The lithographs were signed with such names as Raffet, Bachelier, Gavard, Schotter-Boys, Hinely, Langlume, Molle, Fugelmann and Delpech, while the etchers were represented by Flameng, Martial, Greux, Delauney and Mitchell. Among the subjects depicted were the Cathedral of Notre Dame, showing the then wooden bridge connecting the city with the left bank of the river; the Pont-Neuf, or new bridge, built in the sixteenth century and encumbered with shops; the Saint Antoine gate, with the Bastille showing in the distance; the Louvre as it was, with one of the towers of Charles V (fourteenth century) marking the end of the right wing; the Place Vendome, then called the Place Louis le Grand, with the statue of Louis XIV where the Napoleonic column now stands; the dungeon of the Temple, where Louis XVI was emprisoned prior to his execution; the Montmartre hill, crowned with windmills, and a view of the Arc de Triomphe on the day of the arrival from St. Helena of the ashes of Napoleon.

In order to lend more distinction to the exhibits, or more particularly to the inauguration of the Museum of French Art in New York, the members of the French delegation to the Champlain tercentenary attended the opening in a body and gave assurance of the hearty cooperation of France and of the French artistic societies and organizations in the work of the Museum in New York. Coming from the lips of such men as Gabriel Hanotaux and President Cormon of the Beaux Arts, these assurances speak volumes.



MONTMARTRE.



THE INDEPENDENT PRESBYTERIAN CHURCH, SAVANNAH, GEORGIA.

EARLY AMERICAN CHVRCHES

PART VII

THE INDEPENDENT PRESBYTERIAN, SAVANNAH, GA.—FIRST PRESBYTERIAN, NEWARK, N.J.—TRINITY, NEWPORT, R.I.—PARK STREET, BOSTON, MASSACHVSETTS.

BY AYMAR EMBVRY II

WE WERE NATURALLY ACCUSTOMED to think of Savannah as being a very old city but it was in fact settled only in 1733, and for many years developed slowly, and the very interesting old houses for which Savannah is like Charlestown, famous, date from the early part of the nineteenth century. The excellence of much of the work in Savannah may be attributed to the fact that a well trained English architect named Jay was in practice there from about the year 1800, and was the designer not only of a number of most interesting houses, but also of the Telfair Art Gallery and possibly of the Independent Presbyterian Church. The building illustrated in this article is a reproduction to measurement of the original building which was burned some years since, and though this building is of white marble the spirit and proportions are very clearly those of the older wood building. The spire is of wood above the tower, and seems one of the best designed of all the older ones; both in the method of transition from the square to the octagon and also in the proportions of each story. The window treatment is distinctly not the usual type of Colonial work, but suggests rather the Gothic method of subdivision. Judged from the photograph the structure would appear to be of the ordinary plan with the relations of the length to breadth about as three to two; but the building is actually a square with the porch and tower added; and the interior is covered by a flat dome carried on four columns, with galleries around three sides and the pulpit on the fourth. Certain of the details of the interior are a departure from what was then recognized practice, notably the full entablature between the capitols of the columns and the cornice forming the lower part of the dome; and the placing of the pulpit directly against a window. The treatment of the pulpit is itself a most agreeable piece of work, and the window against which it is placed is framed by a light column on either side, again with full entablature and a well designed architrave against the wall. The church is to Georgia what St. Michaels is to South Carolina, and St. Pauls Chapel to New York, and its architecture is certainly worthy of its reputation.

THE FIRST PRESBYTERIAN CHURCH

Newark, N. J.

WHILE THERE WERE RELIGIOUS SERVICES held in the state of New Jersey before the congregation of the First Presbyterian Church was organized, this was the first definite and fixed religious organization in the state. The early members of the congregation were New Englanders, coming, I believe from Bran-



THE INDEPENDENT PRESBYTERIAN CHURCH, SAVANNAH, GEORGIA.



THE FIRST PRESBYTERIAN
CHURCH, NEWARK, N. J.



THE FIRST PRESBYTERIAN
CHURCH, NEWARK, N. J.



TRINITY CHURCH,
NEWPORT, R. I.



INTERIOR TRINITY CHURCH,
NEWPORT, RHODE ISLAND.

ford, Conn. The first minister was one Abraham Pierson, a Scotchman, and the first of these successive church edifices for the congregation was built in the years 1663-1665. This original church was stockaded and was used as a sort of fort for defense against Indian attacks. The second building was erected in 1746, and the third and present building in 1787. As was the case with many of the churches built about this time, some of the timbers of the earlier edifice were incorporated into the later structure, and with the natural tendency to exaggerate age the date of construction of the earlier church is occasionally given as being that of the present building. The best data at hand however gives 1787 as the year in which the building was begun although the "Georgian Period" in a footnote gives it as 1774. While the church records are very full as to the ministers throughout the church history, and give in detail the contributions received, they are absolutely silent as to the designer and I have been unable to find any light on the subject. Its history has been uneventful, the principal occurence being the foundation of Princeton University within the walls of the former building. The present structure is a plain stone building with a stone tower and a wooden spire, with an interior more than usually elaborate, and some very excellent architecture injured by too much painting of the decorated portions.

THE PARK STREET CHURCH

Boston, Mass.

THE MOST IMPRESSIVE of all the old Boston Churches is unquestionably the Park Street Church, both by reason of its size, and of its location on a plot somewhat elevated above the general level and at a very conspicuous point. The present structure was built in 1809, and was designed by one Peter Banner, and is so far as I know the only piece of work attributed to him. Its design is not that of the classic revival which we would naturally expect at that time, but was very strongly reminiscent of the earlier Colonial work, especially in the slimness of the orders, and the lightness of the detail. In spite of the delicacy of its several parts, the building is as a whole rather clumsy and confused, the problem of dropping the façade below the main level of the church being evidently too much for the designer. One does not feel either that the scale of the quarter circle porches or whatever they may be, between the tower and the body of the building is correct; they should have been either much larger or much smaller. The façade is certainly unique among American churches both in the interpositions of the members just spoken of, and in the treatment of the intersection of the main ridge with the tower, which is very crudely handled, the main cornice returning into a window. The best features of the exterior are without doubt the entrance doorway and the Palladian windows above which are charming pieces of detail and together constitute an admirable architectural motif. Unlike the exterior, the interior is very strongly tinged with Greek color, but it is only half understood and distinctly amateurish. While the building is both too important and too well known to be omitted from any series which endeavors to cover the general field of early American Churches, it is perhaps one of the least excellent of them all because the unpretentious and straightforward design characteristic of most of our early work has here been superseded by an attempt at display beyond the ability of the designer; and even so it is far better designed than nine-tenths of the modern churches in which their architects have endeavored to instill the Colonial feeling.

TRINITY CHURCH

Newport, R. I.

OF THE DOZEN BEST KNOWN CHURCHES in America, Trinity Church, Newport, is certainly one, and its congregation has a long and honored history. The tower is a most excellent piece of architecture, but the balance of the building is plain—almost barnlike—and the interior is not entirely agreeable. It was erected in 1726, and was sawn in two, the back moved out and the space between filled in to conform with the older portions in 1762, but there has otherwise been no change in its construction; and as long as Newport continues to be a fashionable watering place it will probably be conserved as a sort of monumental bric-a-brac by its congregation. Its design often is attributed to Sir Christopher Wren, but without apparent reason; and certainly the building is itself evidence that this was not the case, the tower, (the only piece of design) being extremely different from any of Wren's work. The tower is of a type not uncommon in New England and is perhaps the loveliest example of the square stepped variety extant, its only rival being the North Church in Boston. The interior is one of the few cases in which two orders are superimposed and the only one in which square columns were used.

The general effect is interesting although not very dignified, and the superfluity of vaulting in the ceiling is restless and disturbed, especially when one considers the fact that the building is so obviously frame; our Colonial architects did a good many things that we would never dare to do; and got away with them, but this is not one of the successful innovations. Of the different portions of the interior the pulpit canopy and the candelabra are perhaps the most interesting and the old square pews still remain in position.

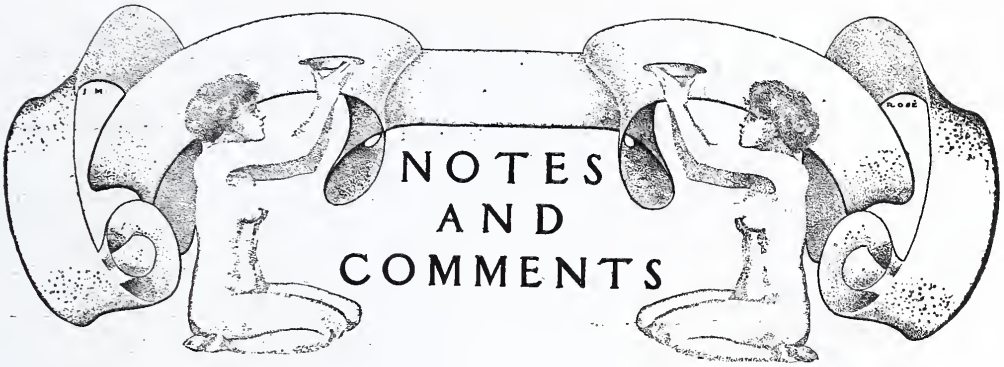




PARK STREET CHURCH,
BOSTON, MASSACHUSETTS.



INTERIOR, PARK STREET CHURCH, BOSTON, MASS.



IMPROVING FIFTH AVENUE.

The report of the committee, appointed by Borough President McAneny, to suggest means of improving Fifth Avenue, New York, is of much more than local interest. Some papers have referred to the committee as having for its purpose the preparation of plans which would make Fifth Avenue the handsomest street in the world. The committee at once disclaims any such expectation. It says that below Fifty-ninth Street the time has already passed when there can be a hope of making it the equal of splendid avenues in Europe. It believes, however, that the avenue's present dignity can be maintained, and even increased, and that it may be saved from becoming "another and cheaper Broadway." To this end, one of the most important suggestions, and perhaps the one of most widespread interest, is that with reference to a restriction of building height. The committee suggests that legislation be asked to give the Board of Estimate authority to limit the cornice line of all buildings on the avenue, and even a certain distance off the avenue on the side streets, to a height of one hundred and twenty-five feet from the curb, the buildings being then allowed to go up twenty-five additional feet in a receding mansard. This would make the building height limit one hundred and fifty feet. The University Club now rises one hundred and twenty-eight feet; Sherry's rises one hundred and sixty-two feet. Thus the suggestion, though not considered ideal by the committee, is believed to be a satisfactory and practical compromise which, while fair to the property owners, will prevent the avenue from becoming a canyon. The committee suggests that after this restriction has been secured, a requirement of "uniformity in the skyline and perhaps the façades" might follow. Other recommendations of very general interest are that the Board of Estimate shall pass a resolution forbidding the establishment on the avenue of any "sweatshop, or manufactory of dry goods or wearing apparel;" that isles of safety shall be constructed at the crossings of the busiest streets, and that stands for waiting cabs shall be established in connection with these isles of safety. These cab stands the committee believes will do much to lessen the congestion of traffic on the streets, and should even result in a reduction of cab fares. Local suggestions of special interest are that the avenue be widened between Fourteenth Street and Twenty-third; that Madison Square be replanned; that trees be planted on both sides of the street in front of the Public Library and of the Cathedral; and on the east side of the avenue the entire length of Central Park; that the Plaza be replanned, both for appearance sake and for convenience, and that ultimately a monument of some kind be erected at 110th Street, fittingly to close the vista. The members of the committee are: Arnold W. Brunner, Joseph S. Auerbach, Edward Holdbrook, George F. Kunz, Nelson P. Lewis, George T. Mortimer and Robert Grier Cooke.

THE PLANNING OF DELHI.

In noting recently that a committee of English town planners was to be summoned to Delhi, to assist in planning the new Imperial Capitol of India, the hope was expressed that their services would be only advisory, the details of the plan being left to local talent. This hope has been realized. The committee selected, and now in India, consists of Captain George Swinton, the new chairman of the London County Council, who serves as chairman of the committee: John A. Brodie, the City Engineer of Liverpool; and two Fellows of the Royal Institute of British Architects, H. V. Lanchester and Edwin L. Lutyens. The former is secretary of the town planning committee of the Royal Institute and editor of "The Builder." His firm made the designs for the Cardiff Municipal Buildings and Law Courts. Mr. Lutyens is consulting architect for Hampstead Garden Suburb and was the architect appointed to prepare designs for the King Edward Memorial. The committee, which was appointed by the Secretary of State for India, will report to the government of India; and the explanation is offered that its work will be of a general and preliminary nature, probably occupying four or five months, including the travel, and will involve no questions of detailed planning or architectural design. London Municipal Journal has printed the polite notes exchanged by the government of India and the Lord Mayor of Liverpool in reference to the temporary release of Mr. Brodie from his duties as city engineer. The city required that the Indian government make its own arrangements with Mr. Brodie as to remuneration and expenses, and that it refund to the corporation the amount of his salary as city engineer for the period of his absence.

THE CAMPANILE IN VENICE.

Venice never exemplified more convincingly her picturesque way of doing things than in the celebration of the completion of her new campanile. The whole occasion, when one comes to think of it, was picturesque, for it was really nothing more or less than a glorification of architecture. The structure itself, serving no modern commercial purpose, gains its significance from its architectural quality, its architectural setting, and its architectural associations. The fallen tower which it replaced had stood for centuries, the wonder of sight-seers who had journeyed from all the world to see the architectural ensemble of which it was so dominant a part. The very contributions which paid for its rebuilding came not only from all parts of Italy but from many other countries. The total sum amounted to 2,000,000 lire.

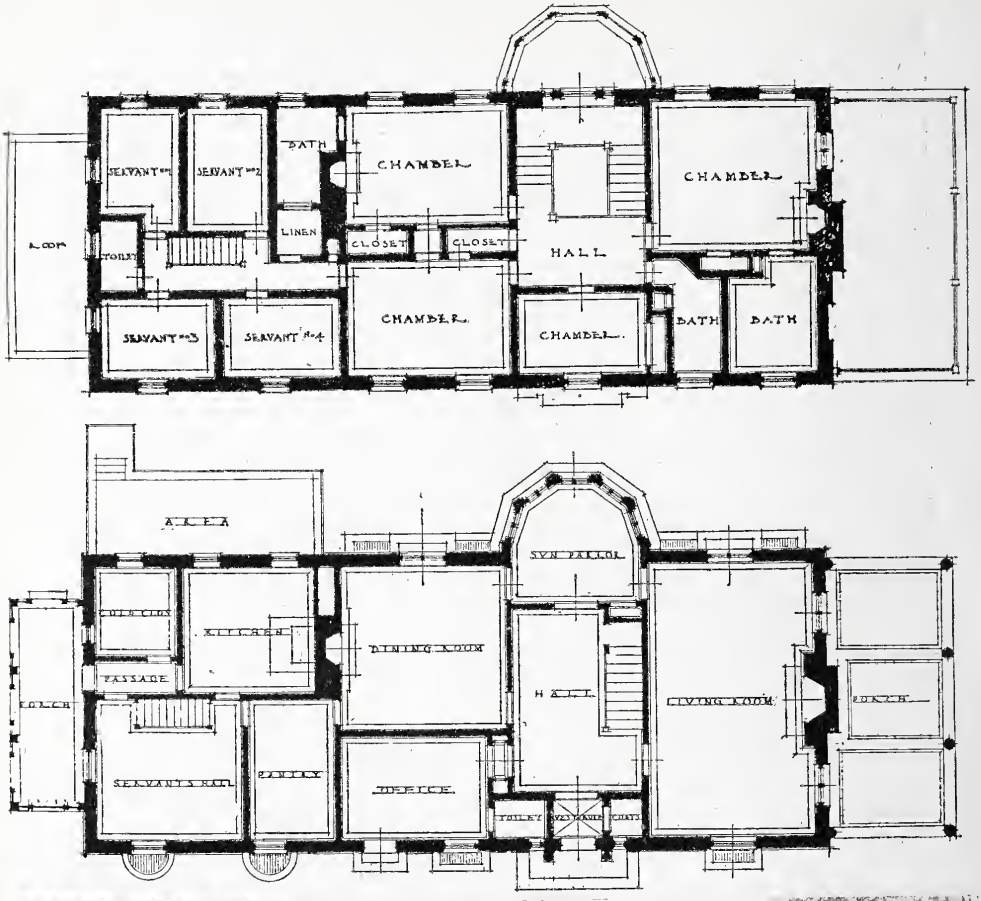
It has taken nine years to rebuild the campanile, which after all is only 320 feet high, while in New York steel towers of 700 feet go up in as many months. But between the beginning and the completion of the original tower there passed four centuries. Thus the record isn't bad for Italy, for the new structure is not only practically a replica of the old, but it was built in the ancient manner. It is said that to raise, only ten feet, the movable scaffold, which was built around the tower, for the bricklayers to stand upon, took eight men turning jackscrews for three hours. The only concession to modernity in the new campanile is an elevator. But there was also this interesting and striking concession in the celebration: the architectural lines of the palaces which surround the square were outlined at night by 60,000 electric bulbs.

REPORT OF NEW YORK ART COMMISSION.

The attractively issued report of the Art Commission of the City of New York for the year of 1910 is late, as usual, in coming from the press. But the book is so well illustrated that it is quite worth waiting for. The number of matters submitted to the Commission during the year was 134. Of these, 115 were approved as submitted. Twenty submissions which were disapproved, in whole or in part, dealt with nineteen different structures. For eight of these structures amended plans were prepared, again submitted to the Commission and approved. For eleven of the structures, the new plans had not been submitted at the end of the calendar year. In four instances submissions were withdrawn. The total number of matters acted upon was the smallest since 1906, comparing with 172 in 1909. The most interesting feature of the report is a series of photographs of disapproved and approved designs, and the series of pictures of the office of the Borough President in the City Hall. The first series is convincing as to the general value of the Commission's work. The report includes a brief appreciation of the City Hall, with special reference to the office of the Borough President. The opinion is expressed that if the whole building's interior were restored, it would be so attractive that the city



HOUSE AT PORT DEPOSIT, MARYLAND.
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would find it necessary to put up placards stating the hours during which it might be seen by visitors. The work of restoration in the Borough President's office, says the report, could be made nearly perfect, for Mr. McComb's original drawings for this room were accessible and fairly complete in the library of the New York Historical Society. In addition a number of the Art Commission possessed an old print of this room as it was in 1831 before any alterations had been made. The room as restored certainly is very beautiful.

SAN FRANCISCO'S CIVIC CENTER.

When San Franciscans were asked to vote this spring on the question of issuing $8,800,000 in bonds, for the construction of "a new city hall and the acquisition of lands adjacent thereto for public buildings," they did so with an enthusiasm which made the affirmative vote ten to one. The campaign had been vigorous, and a favorable outcome was so confidently expected that the plans were all in readiness. Thus, as soon as the result of the voting was announced, condemnation proceedings were started affecting the hundred and eight separate parcels of property which would be needed for the improvement. The terms of the competition for the City Hall design were also immediately arranged by the consulting architects, John Galen Howard, Frederick H. Meyer and John Reid, Jr. The plan places the City Hall on Van Ness Avenue. Directly east of it will be a spacious plaza, probably containing an imposing music stand. Facing the plaza on its south side will be the auditorium which the Panama-Pacific Exposition Company builds at a cost of a million dollars, the city providing the site. Facing the plaza on its north side will be the Art Museum which is expected to cost another million. East of the plaza, and thus balancing the City Hall, there will be two buildings separated by a wide street with parking in the center. This street, which is Fulton, extends directly into Market Street. The buildings between which it passes will be the Public Library; for which money was provided by a previous bond issue; and the Opera House, for which the money, estimated at a million dollars, is now being raised by popular subscription. Hence about four million dollars, in addition to the $8,800,000 voted for the Civic Center, will be spent on public buildings to be grouped at the center. The general design is perfectly symmetrical, the ground which the improvement is to occupy has been almost unbuilt upon since the earthquake, and there can be little question that the final effect will be extremely handsome. Into the campaign which led to approval of the bond issue, the administration, under the tireless personal leadership of Mayor Rolph, threw itself with great vigor. The Chamber of Commerce, the labor unions, the women's clubs, the League of Improvement Clubs, and local organizations to the member of four score also took action approving the issue. A dozen or more meetings in behalf of it were held every night; the mayor, in addition to constant speaking, wrote a series of articles on the subject for the newspapers; and when Tetrazzini—the adored of San Francisco—made, in Market Street, her dramatic farewell to California, four days before the election, she included a plea to the people to vote for the bonds! She said that a few years hence she wanted to return and sing in the new auditorium. As to that structure, the exposition directors naturally felt the need of the city's possessing one somewhere, and there was no particular necessity for its being on the exposition grounds, if the land for it would be given elsewhere—especially on so desirable a site as the proposed Civic Center, Van Ness Avenue being the main approach to the exposition.

PROGRESS OF GARDEN CITY MOVEMENT.

An annual meeting of more than usual interest was that which was held a few weeks ago at the Carpenters' Hall in London, when the Garden Cities and Town Planning Association met in its thirteenth annual conference. Sir Ralph Neville said, in the course of the president's address, that the work of the association was not only very large and extensive but was increasing enormously every year. He reminded his hearers that the association had grown out of a handful of men who surrounded Ebenezer Howard when he first published his book and determined, so far as their limited capacities went, that they would help him to realize his ideals. The president declared that he knew of no social movement which had gone forward so fast and so far as that which was then inaugurated. By way of proving this statement he reported that a new Garden Suburb had been undertaken during the year at Warsaw in Russia, under the auspices of the assoeiation; that it had been advising and giving assistance to a scheme

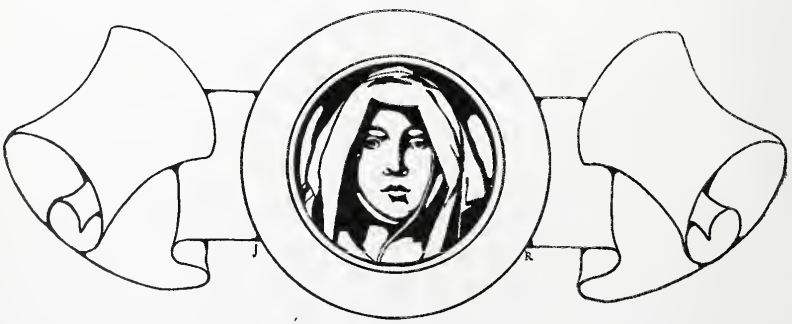
at Budapest; that it was now in correspondence with Barcelona, where a new association was being formed; that a plan was under consideration for sending a representative to the Australian Colonies; that inquiries had comes to the association from Newfoundland and from several parts of Canada and the United States; that there were letters from a dozen places in South Africa and from the Belgian Congo. As to England itself, he reported that no less than thirty-seven Garden Cities were either in actual being or in course of progress at the present time.

A motion was carried at the meeting that the association conduct a National Congress on Town Planning this summer at Cardiff in South Wales. The place was chosen because of the special interest in housing. and the special urgency of that subject, in South Wales.

In an address by Prof. Adshead, which was a feature of the meeting, there was an interesting reference to the individuality of cities, in which Mr. Adshead repeated the contrast which he has before drawn between London and New York, and which seems to have especially impressed him. Speaking of London, Mr. Adshead said: "Unlike Paris, she is not a city of great formality; nor is she, like Vienna, dependent for her interest on what may be described as a Monumental Modernity; nor, again, is she like New York, a city tremendous in scale and a miracle of ingenuity. Compared with Paris, she gains an advantage in the majestic scale of her river and in the interminable interest of her picturesque beauty. Compared with Vienna, she possesses in her monuments the interest of age and greater architectural purity; and compared with New York, she possesses a sequence of noble compositions altogether wanting and impossible in that democratic city. . . . Compared with New York, however, London is an immense village in point of scale. In modern London the scale will need to be increased. Selfridge's Stores (the conception of an American architect), compared with Harrod's, or the Russell Hotel, exemplifies what I mean."

EUROPEAN CIVIC TOUR.

Considerable interest attaches to the announcement of the "European Civic Tour," for which the committee of arrangements consists of Frederic C. Howe and George B. Ford, who need no introduction to readers of this magazine, and Royal R. Miller, an experieneed travel director. There is an advisory board, imposing in its list of civic workers, and a long list of European correspondents who are expecting to assist in making the trip a success. The tour is frankly an outgrowth of the trip conducted last year by the Boston Chamber of Commerce. The party will leave New York June 27th and return September 1st. In England it will visit the garden cities, will study great municipal undertakings—such as the docks of Liverpool and various housing schemes—and interesting examples of landscape architecture. Paris, "the dead cities" of Belgium, all the leading cities of Germany, and Munich and Vienna. There is every reason to believe that on its return the party will give an impetus to municipal development in the United States.



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